New Perspectives on Historical Latin Syntax 2

Constituent Syntax: Adverbial Phrases, Adverbs, Mood, Tense

Philip Baldi
Pierluigi Cuzzolin
Editors



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List of abbreviations

[anim]	animate (as semantic feature)
[def]	definite (as semantic feature
[hum]	human (as semantic feature)
1st	first person
2nd	second person
3rd	third person
abl.	ablative
acc.	accusative
AcI	*Accusativus cum Infinitivo*
adj.	adjective
adv.	adverb
AG	adjective-genitive (order)
ALat.	Archaic Latin
AN	adjective-noun (order)
AS	Anglo-Saxon
BCE	before the common era
Catal.	Catalan
CE	in the common era
Celtiber.	Celtiberian
CLat.	Classical Latin
coord.	coordinating
cop.	copula
dat.	dative
decl.	declension
deict.	deictic
det.	determiner
DG	determiner-genitive (order)
ELat.	Early Latin
Eng.	English
Fr.	French
fut.	future
Gaul.	Gaulish
gen.	genitive

Ger.	German
Gk.	Greek
GN	genitive-noun (order)
Goth.	Gothic
Heb.	Hebrew
Hitt.	Hittite
IE	Indo-European
imperat.	imperative
impf.	imperfect
Ind.	Indic
indic.	indicative
infin.	infinitive
instr.	instrumental
interrog.	interrogative
Ir.	Irish
It.	Italian
Lat.	Latin
Lep.	Lepontic
LLat.	Late Latin
loc.	locative
Med.	Medieval
ME	Middle English
MFr.	Middle French
MHG	Middle High German
ModRum.	Modern Rumanian
N	noun
NA	noun-adjective (order)
NcI	*Nominativus cum Infinitivo*
NG	noun-genitive (order)
nom.	nominative
NP	noun phrase
num.	numeral
OE	Old English
OFr.	Old French
OHG	Old High German
OIr.	Old Irish

OIt.	Old Italian
ord.	ordinal
OSard.	Old Sardinian
Osc.	Oscan
OSp.	Old Spanish
OSV	object-subject-verb (order)
OV	object-verb (order)
OVS	object-verb-subject (order)
pass.	passive
Paelign.	Paelignian
perf.	perfect
pers.	person
PIE	Proto-Indo-European
pl.	plural
Port.	Portuguese
PP	prepositional phrase
pred.	predication
pres.	present
pron.	pronoun
Prov.	Provencal
ptcp.	participle
Rom.	Romance
Rum.	Rumanian
Russ.	Russian
Sard.	Sardinian
sg.	singular
Skt.	Sanskrit
SLat.	Silver Latin
SOV	subject-object-verb (order)
Sp.	Spanish
spec	specifier
subj.	subject
SVO	subject-verb-object (order)
Sw.	Swedish
Umbr.	Umbrian
V	verb

VO	verb-object (order)
voc.	vocative
VOS	verb-object-subject (order)
VSO	verb-subject-object (order
W.	Welsh

Special signs

::	indicates speaker switch in dialogue
←	is replaced by
→	onward
<	develops from
>	develops into
*	indicates a reconstructed form (acc. to context)
*	indicates an ungrammatical sentence (acc. to context)

Other abbreviations

cod./codd.	codex
BTL	*Bibliotheca Teubneriana Latina*
ed. princ.	*editio princeps*
IG	*Inscriptiones Graecae*
Lex XII tab.	*Lex XII Tabularum*
ms/mss	manuscript/manuscripts
OLD	Oxford Latin Dictionary
sc.	*scilicet* (that is to say)
S. C. de Bacch.	*Senatus Consultum de Bacchanalibus*
s.v./s.vv.	under the word/s
ThLL	*Thesaurus Linguae Latinae* (textual citations follow *ThLL* conventions
v.l./vv.ll.	*varia lectio* (alternate reading)

Philip Baldi and Pierluigi Cuzzolin

Prolegomena

1. Background and methodology

With this volume (the second of four) we continue the publication of *New Perspectives on Historical Latin Syntax*.[1] This work has been underway for longer than either of us cares to remember, though looking back from the vantage point of the present, it is hard to imagine that it could have taken any less time than it has, or will, by the time the last volume is published.

Given the number of years involved in its formation, the project's history bears recounting. *New Perspectives on Historical Latin Syntax* was conceived on an excursion bus in Spain while the two editors were attending the IX International Colloquium on Latin Linguistics in Madrid in 1997. Baldi was telling Cuzzolin about his book on the history of Latin (Baldi 2002), which was underway at the time, and was lamenting the fact that, despite his efforts to do so, Baldi had failed to provide anything but a few scattered

1. The work was originally announced as *The New Historical Syntax of Latin*, and was projected to contain chapters on "Non-finite subordination", "Negation", "Apposition", "Requests and commands", and "Voice". Unfortunately, the authors of these chapters failed to produce the work they had promised, and by the time their inaction became fully apparent to the editors, it was too late for us to recruit new contributors. We deeply regret the absence of these chapters, whose subject matter is so central to the history and structure of Latin. So a less inclusive title was developed which reflected the actual contents, and which also conveyed the novelty of our approach; hence, *New Perspectives on Historical Latin Syntax*. Another departure from the original plan concerns the number of volumes. In the "Prolegomena" of Volume One we described the work as comprising three volumes. But the sheer size of many of the contributions, which in some cases are equal to small monographs, compelled the publisher, with our agreement, to subdivide the contents of the projected Volume Two into Volumes Two and Three. By the time this decision was taken, it was too late for us to change the text of the Prolegomena of Volume One.

observations on Latin historical syntax. The reason, he explained, was that the book was situated squarely in the Neogrammarian/structuralist tradition as it laid out the facts of phonological and morphological change from Proto-Indo-European (PIE) to Latin, and that syntax simply didn't lend itself to the same sort of account. There existed no complete account of PIE syntax from which Latin could be revealingly derived, as was the case for phonology and morphology. So short of reconstructing PIE syntax first, then handling the Latin facts accordingly, the prospects for providing an account of historical Latin syntax seemed well beyond the scope of Baldi's book, and outside the parameters of traditional approaches to linguistic change.

Cuzzolin agreed with Baldi's methodological assessment, but rather than concede the hopelessness of the situation, he suggested a three-pronged strategy, proposing a new historical syntax of Latin that would fill the need which Baldi's book (and others before it) failed to provide. The first part of the strategy involved a cooperative effort between the two of us, as joint coordinators of the proposed enterprise. Thus began a collaboration that has stretched far beyond this project, and promises to continue into the future. The second part involved the recognition that a subject as vast as the evolution of Latin syntax, from its PIE beginnings up to the Early Middle Ages, was a task beyond the capacity, and the capability, which we together brought to the table. A team of specialists would be required to do the job. Finally, there was the crucial matter of framework. We both recognized the inadequacies of structure-based approaches to syntactic change, especially for an account on the scale which we imagined would be required to write an explanatory historical syntax. We saw traditional grammar as insightful, but not sophisticated enough to reveal the sorts of generalizations that linguists are bound to provide. Various instantiations of generative grammar were discussed, but the general inadequacy of this model in dealing with the syntax of extinct languages, and in providing a general framework for diachronic explanation, loomed large. So we abandoned this approach as a possibility, acknowledging further that neither of us was fluent enough in the theory, and also that the pool of potential contributors from this tradition was vanishingly small. A different approach would be required, one that incorporated structural and functional information into the explanatory formula, one that handled diachronic phenomena, and one in which we felt comfortable. This holistic framework is called the "functional-typological" approach, about which we will have more to say below.

The project percolated until 1999, when we introduced it to our peers at the X International Congress of Latin Linguistics in Paris (published as Baldi and Cuzzolin 1999). By this time we had prepared a provisional Table of Contents and had secured some funding from the US National Science Foundation to explore the framework as it applied to our own subjects, namely Possession (Baldi) and Comparison (Cuzzolin). The team was also beginning to take shape, which was no small accomplishment given the number of scholars worldwide who met all the criteria, namely to be: a Latinist; a linguist; sympathetic to and versed in the functional-typological approach; interested in diachrony; willing to work on the project. Settling the roster of collaborators was the most difficult part, not only because the pool is so restricted, but also because the parameters of the assignment and the normal ebb and flow of academic commitment eliminated many fine scholars. A representative set of team members assembled at the University of Bergamo in June of 2000, when the basic intellectual and structural guidelines of the project were discussed and agreed upon by the group. It was around this time that members started working on their chapters. The group met again for a three-day conference at the Rockefeller Foundation Villa in Bellagio in September, 2001, where an intense vetting of each contribution was performed by the group on every presentation. This was followed by a mini-conference at the University of Bologna in June of 2003, when semi-final drafts were presented and critiqued. Deadlines were set, and reset, several times, and by June of 2005 we had many of the chapters, much expanded and hugely improved, available for the editing process. By this time we realized, with the agreement of the editorial staff of Mouton de Gruyter, that two or more volumes would be necessary, largely because of the considerable excess over the original page limit on the part of nearly every contributor. In fact, the remaining two volumes of this four volume work are underway as this is being written, and we anticipate their timely appearance.

2. Historical syntax and Latin

The term "history of Latin" (or of any other ancient IE language) in its most widespread usage means "history of phonology and morphology" as they have developed from PIE. Comparative grammars of Latin (e.g., Leu-

mann 1977, Sommer & Pfister 1977, Meillet & Vendryes 1979, Sihler 1995, Baldi 2002) have concentrated primarily on the development of the phonological and morphological systems of the language, with comparatively little attention paid to historical syntax. This emphasis is reflective of the Indo-European tradition in which the aforementioned works were executed. The few existing historical syntaxes of Latin are also methodologically located well within the mainstream of the Indo-European linguistics, with an emphasis of structure over function. In this category are the volumes of Draeger (1878–1881) and Scherer (1975), as well as the more synchronically-oriented grammars of Kühner & Stegmann (1912–1914), Hofmann & Szantyr (1965), Woodcock (1959), and Ernout & Thomas (1964).

The most dramatic scientific accomplishments of the past two hundred years have been in the areas of historical phonology, morphology, and lexicon, resulting in numerous handbooks, encyclopedias and etymological dictionaries of Indo-European and its descendants. However, comparatively less progress has been made in the reconstruction of an agreed-upon set of syntactic structures which characterize the protolanguage, and the corresponding principles which govern the syntactic evolution of the daughter languages. The most recent outlines of PIE, by Beekes (1995), Szemerényi (1996), and Meier-Brügger (2003) contain no treatment of syntax, though Fortson (2004) is a qualified exception. And despite the ongoing progress and promise of the approach to PIE syntax based primarily on word order typology in the massive research program initiated by W.P. Lehmann (e.g., 1974, 1993), a complete explanatory syntax of PIE is yet to be developed. Furthermore, historical syntax as a field continues to lag behind phonology and morphology methodologically, so that explanatory diachronic principles which are not bound to particular synchronic formalist theories have yet to be developed. The result: historical linguistics has failed to provide a comprehensive method with the power to explain large-scale syntactic developments in the long-term history of a language. This is not to suggest that diachronic syntactic analyses do not exist (cf. for example the work of Harris and Campbell 1995, Lightfoot, e.g., 1999, Miller 2002, Kiparsky, e.g., Condoravi and Kiparsky 2001, Hopper and Traugott 2003). These approaches provide accounts of particular syntactic developments in specific languages, or of specific diachronic phenomena resulting from grammaticalization. What we are attempting to do in this historical syntax is to develop a methodology, which

includes grammaticalization phenomena, around which the *entire* syntactic history of a language can be written.

The general omission of syntax from the study of the history of Latin is a consequence of many factors. Chief among these are the aforementioned lack of a detailed explanatory syntax of PIE, and the dominantly structuralist/formalist approach which typifies Neogrammarian and post-Neogrammarian thinking, with its primary focus on the rules governing the regular development of the phonological and morphological systems of the IE languages from PIE. Such rules and processes are less obvious in the development of the syntactic system, and there is no verified methodological principle to guide the way in the study of syntactic change. For example, the regularity principle of exceptionless sound change provides a strict methodological guideline in the description of phonological, and to a lesser extent morphological change. For syntax, no such principle exists so that there is no methodologically consistent means to map syntactic structures from reconstructed PIE to the actually occurring daughter languages. Typological and grammatical reorganizations are often so extreme between PIE and its descendant systems that structural mappings of the type familiar from phonology and morphology, namely "X > Y/Z", are often difficult to identify.

The traditional strategy according to which the historical description of the syntax of Latin and other early IE languages has been executed is one of evaluating data structurally, just as in phonology and morphology. An unspoken principle of explanation is the chronological order in which structures are attested, or their marginality in the system. Thus, the older or more marginal a structure is, the more it is privileged in historical analysis. Deeper and more integrated linguistic explanations, when they are attempted, are provided in piecemeal fashion without full consideration of the overall picture of the syntactic development of Latin from PIE, or of syntactic changes which have taken place within the historical period of Latin itself. Such isolated explanations are particularly prominent in generative and post-generative analyses of syntactic change, which attend to a relatively small number of structural types and deal with their development in terms of pre-established (synchronic) formal considerations. Furthermore, little attention has been paid to the discourse levels represented in ancient texts, and to the different types of syntactic phenomena which different textual genres can reveal within a language. This is a particularly serious problem in formalist approaches to syn-

tactic change, which generally have underdeveloped mechanisms for dealing with syntactic variation by text type, since such variation frequently involves discourse-level and pragmatic considerations.

3. The functional-typological approach

Because of the failure of traditional structuralist and current formalist approaches to provide a coherent method for the study of large-scale, system-wide syntactic change, and with it the failure to provide the means to study the syntactic evolution of ancient languages like Latin in their historical entirety, it seems clear that a new approach is necessary. The approach we have tried to develop in this work is a holistic one, in which structural considerations of the traditional type are combined in a complementary and balanced way with functional and typological principles. The functional/typological perspective provides a powerful alternative to the strict structural models of the nineteenth century and their later formalist descendants. Of course, the perspective adopted in this historical syntax is that the functional/typological approach and the formal one are not incompatible (see Newmeyer 2003, with ensuing debate). In addition, even though typological descriptions of single languages are becoming more common in the literature, typology by definition is ideally based on a rich sample of genetically unrelated languages. How then are we to profit from a typology based on a single language? One claim underlying our approach is that the vertical or diachronic dimension of a language provides a typological equivalent to the horizontal or synchronic comparison of genetically unrelated languages. For example, in its history from Proto-Indo-European, Latin shifts from a "be" language to a "have" language as regards its basic expression of predicative possession. That is, it shifts from the *mihi est liber* type of expression ("A book is to me") to the *habeo librum* type ("I have a book"). This diachronic shift is in complete compatibility with the typology of possession developed through the study of unrelated languages synchronically, namely a distinction between "be" and "have" expressions, conforming right down to the type of "be" language that it was originally (the locative type) to the etymological source of the "have" verb (from "seize, grasp"). See Baldi and Nuti, this work, vol. 3.

Another basic concept underlying a functional/typological grammar are that cognitive principles are involved in grammatical organization, and that these principles are relevant to the description and history of a language. In this methodology, the relevant facts include typological variation for a particular construction and the semantic and pragmatic function of that construction in each language. In a formalist methodology, on the other hand, the facts consist of a variety of constructions, within a single language or across languages, that display the same, or almost the same domains, of application (Croft 1991: 17). Given the often considerable changes that have taken place between the ancestral PIE stage and the actually occurring daughter languages, or between Archaic Latin and Late Latin, it is clear that such constructions as may be present in one stage may be wholly absent in another, or vice-versa, with the result that some potentially important fact of grammatical history may be missed.

For example, PIE quite clearly had a mood (the optative) whose primary independent function was to express some wished-for or desired outcome on the part of the speaker. Latin gave up the optative mood in the pre-literary period, and collapsed it functionally with the subjunctive, the common thread between the two moods being that both express some *irrealis* condition (a few morphological traces of the optative survive). In traditional structure-based approaches to historical syntax, this is the extent of the explanation. However, a functional/typological perspective is concerned not with "*What* happened to the optative as it developed from PIE into Latin", but rather "*How* did PIE express the notion of 'desired outcome', and *how* does Latin express the same notion"? Latin, having given up the optative mood, innovates in exploiting a dominantly lexical expression of "desired outcome", namely *utinam* 'would that' and through the use of verbs like *sperare* and *velle*, both meaning 'wish', but originally meaning 'thrive, prosper' and 'want, choose' respectively.

Such structural asymmetries can be seen from the perspective of the descendant as well as that of the parent. As an example of a syntactic construction for which there is no apparent Latin antecedent, we note that in French there is an aspectual construction which expresses recency, marked by the verb *venir* 'to come' accompanied by an infinitive and the preposition *de* (*Il vient de voir Marie* 'He just saw Marie'). This construction has no direct structural ancestor in Latin (**venit de videre Mariam*). Its origins involve functional and semantic changes in the verb; changes in the function

of prepositions; and changes in the grammatical function of infinitives, all to create a novel means of expressing verbal aspect. No simple structural conversion can tell the story.

In the functional/typological approach, historical syntactic phenomena are analyzed according to a continuum, along which are located parameters relevant to syntactic description. This continuum of possible expressions of a given feature or category is deduced from the typological study of the world's languages. Such a study is designed to reveal patterns of expression of particular concepts, and to allow the formation of universal generalizations according to which data in individual languages can be evaluated. It is presupposed that all linguistic phenomena, including syntactic ones, can be arranged on a scale from the maximal form of expression (e.g. lexical) through intermediate stages (e.g., syntactic or morphological) to the minimal form of expression (e.g. phonological). Relevant to the conception of grammatical scale is the notion of the implicational universal: when changes take place they are assumed to have occurred along the continuum in a non-arbitrary order. For example, in our survey of possession, we found no examples of "have" languages becoming "be" languages, only the other way around (e.g. Yucatec Maya, various Indo-European languages). The change is based on a complex network of lexical ("seize" > "hold" > "have, possess"), pragmatic ("location in" is roughly equivalent to "have") and typological parameters (such as increasing subjectivity as in *John has a book* vs. *A book is at John*).

One of the basic assumptions of this approach is that some semantic notions are pervasively encoded in syntax. This implies that several apparently unrelated phenomena may be well accounted for by the presence or absence of a particular feature. In other words, if a given feature begins to be encoded in a syntactic construction, or, conversely, stops being encoded syntactically, this change provides the trigger for a series of other changes. We can think of this systematic triggering of related changes affecting different grammatical categories as a network. In the example of the optative mood cited above, there seem to be two factors which contributed to the loss of this mood. On the formal side, it seems that the use of the optative in subordinate clauses introduced by conjunctions brought about a syntactic rather than a semantic regulation of the category in late PIE and derivatively in preliterary Latin. In such a syntactic regulation, rules of sequencing are dictated by purely grammatical conditions (W.P. Lehmann 1993: 182-183), partially depriving the

optative mood of its independent function of marking wished-for outcome. On the functional side, it may be that the same change which is acknowledged to have brought about the loss of the productive middle voice in Latin and some other early IE languages, namely a rise in transitivity as late PIE changed from an active language to a nominative-accusative one, also played a part in bringing about the loss of the optative mood in Latin. This is because the notion of wished-for or desired outcome which characterizes the basic meaning of the optative necessarily involves some beneficiary or experiencer role for the subject, as does the middle voice. As Latin moved away from middle expressions and more in the direction of expressions encoding strong transitivity and agency (with active verbs plus reflexive pronouns in place of the middle voice), the expression of the notion "wished-for outcome" shifted from the morphologically expressed optative mood to independent lexical forms such as *sperare* and *velle*. Furthermore, we see that the same network of changes involving a rise in agent-oriented expressions can also explain the loss of impersonal constructions such as *pudet* 'it shames', *paenitet* 'it repents' and *miseret* 'it moves to pity' from Latin to the Romance languages (cf. Bauer 2000).

4. The diachronic dimension

When we speak of Latin, we are properly speaking about a system that includes a number of dialects which can be classified as comprising a single linguistic category (see Figure 1). Of these dialects, "Classical Latin" is surely the best attested because it is the vehicle of classical literature. Far less represented in the record are those spoken dialects of the Latin diasystem which underlie the Romance languages. It is not out of the question, though it is impossible to prove, that all of the dialects of Latin can be traced back to a single homogenous variant, perhaps going back to the beginnings of the first millennium BCE.

Written standardized Latin, the classical language, was accessible to a fairly small segment of the population of ancient Rome. Only a few, most of them men, were sufficiently trained and educated to master the classical variant, which over time diverged more and more from the spoken dialects. And of course there were many regional and social varieties of spoken Latin,

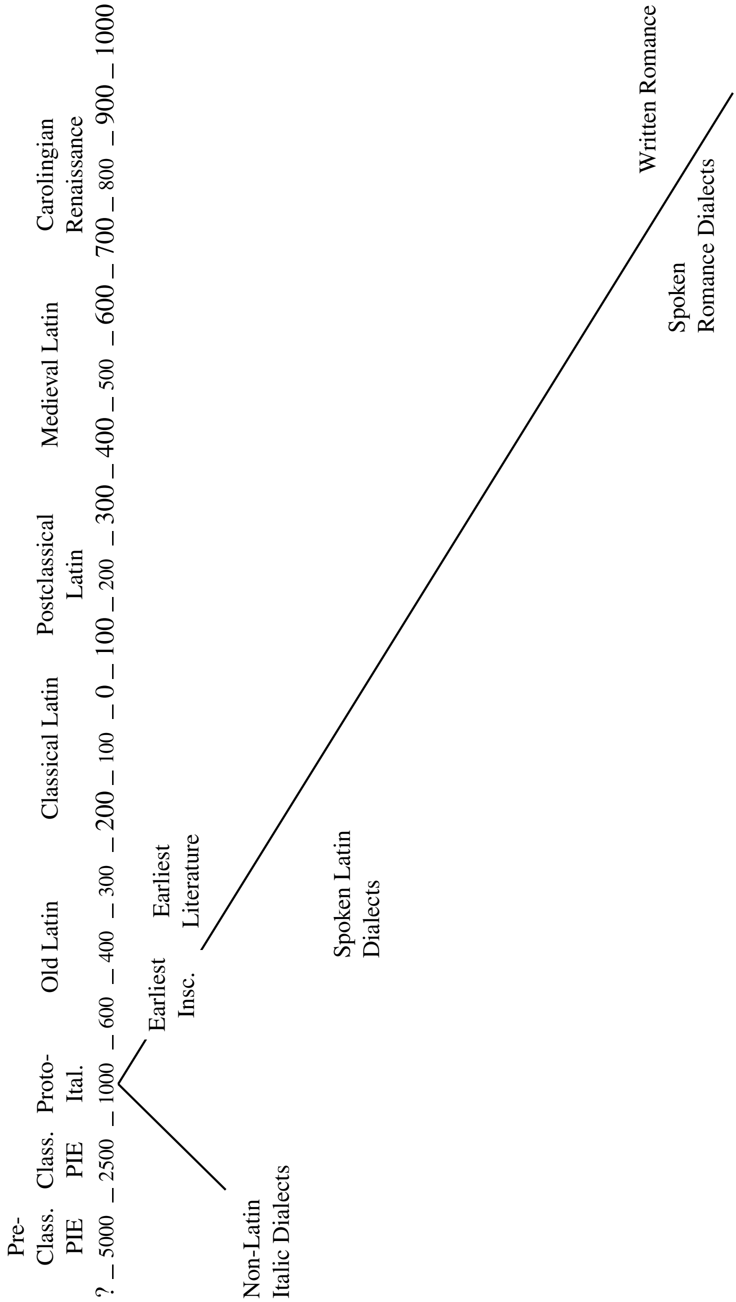


Figure 1. The diachrony of Latin (after Pulgram 1978)

not only around Rome itself, but also in the reaches of the Romania, from Dacia to Sicily to the Iberian Peninsula. The real history of Latin then is one which is represented in the continuously evolving spoken dialects. Written, Classical Latin is not the direct ancestor of any particular Romance language or dialect. Our challenge is to discern the essential features which link all the varieties of Latin together, including the classical dialect, into a uniform and explanatory historical account.

The diachrony of Latin can be approached in two complementary ways. These are the retrospective and prospective dimensions of this or any language. Because of its place in the Indo-European family of languages, Latin has long enjoyed a special place in historical linguistic circles. With its rich inscriptional corpus and deep chronology stemming from the 6th century BCE, Latin is among the crown jewels of Indo-European linguistics. It has a well-deserved reputation for archaism in many areas of the system, and rarely fails to make an appearance in the effort to reconstruct PIE at any level, phonology, morphology, syntax or lexicon.

The early inscriptional monuments of Latin, from the 6th century BCE, offer a trove of materials which are also useful in our consideration of Latin as a language in its own right, not just as a cog in the Indo-European wheel. Inscriptions are full of archaisms of course, not only of the conventional phonological, lexical and morphological type, but in syntax as well, such as the use of nê in negative imperatives, rare in Classical Latin, but common in inscriptions, such as Duenos and Garigliano (Baldi 2002: 197–202).

Latin thus allows us an opportunity to study a linguistic system which, if we combine what we know about PIE, covers a continuous span of perhaps 5000 years of linguistic evolution. If we consider Latin only from the perspective of Proto-Italic, we are dealing with perhaps as much as 3000 years. If we consider Latin from its earliest verified monuments, we have 2400 years of continuous linguistic evolution up to the Romance present. But if we consider Latin as Latin alone, which is our primary task in these pages, we are in a position to assess the evolution of a linguistic system for about 1200 years, for it is this time span which is covered by the period from the earliest inscriptions right up until the breakup of the system into what we might call proto-Romance, that is, the 1200 years from the first inscription to Gregory of Tours.

In addition to its novel methodology and its emphasis on diachrony, *New Perspectives on Historical Latin Syntax* has several other distinguishing char-

acteristics. One is its attempt at *uniformity*: unlike many other multiply-authored works of this type, this one is characterized by a methodology and conceptual framework which has been developed in consultation with all contributors. Of course not all authors have followed the methodological desiderata as strictly as one might hope, owing not only to individual differences and emphases among scholars, but also because of the varying nature of the subject matter. Some topics, for example Numerals, lend themselves better to a structurally-oriented account, while others, such as Modality or Deixis, lean in the other direction. This is why we insist that the approach be *holistic*, incorporating both structure and function in revealing ways. Still another distinctive feature of the *Syntax* is the extremely long time span which it covers, from PIE to Late Latin. While this time span is more easily accommodated for some topics (e.g. Possession) than others, it is a perspective which informs every chapter. For example, the syntax (and pragmatics) of possession can be traced from its PIE beginnings as a locative-possessive with the verb 'to be', through the addition of a verb 'to have' and the eventual elimination of the 'to be' construction by the time of Late Latin, and on into the Romance period. For other topics (e.g., Adverbs), it is somewhat more difficult to speculate on the PIE situation, so the emphasis is on the history of the category and its syntax within Latin itself. The essential point, however, is that there is an implicit diachrony in every chapter; what varies are the beginning and end-points of the investigation.

Finally, and in some ways most importantly, *New Perspectives on Historical Latin Syntax* is distinctive because it is text-based. Team members all agreed that it would not be sufficient to mine the standard grammars like Bennett (1910–1914), Hofmann & Szantyr (1965), Kühner & Stegmann (1912–1914) for examples, because to do so would lead to a simple rehash of the *status quo*, and would deter contributors from asking new questions. Guided by the requirements of the functional-typological approach and the necessity for textually-based analyses, authors of individual chapters have entered much new territory. As a way of assuring maximal access to textual material, contributors have all worked with electronic databases such as the *Bibliotheca Teubneriana Latina* (*BTL*) and the Packard Humanities Institute CD Rom, and have generally relied on the best paper editions available for Latin authors, usually either the Teubner or Oxford texts.

5. Audience

New Perspectives on Historical Latin Syntax is intended for several audiences. The first of these is the community of linguists, specifically historical linguists, who may be interested in the strategies we have applied in assessing the historical syntax in a corpus language with such a rich and deep textual and intellectual tradition as Latin. For this audience we have attempted to make the material as accessible as possible, especially by including English translations for every numbered example which occurs in each chapter. Our second target is Classicists, especially Latinists, who are interested in the syntax and semantics of Latin poetic and prose texts. This group will find the linguistic terminology used in the volume, and the mode of argumentation, generally "user-friendly", and should be pleased to discover that they can follow the arguments, despite not being professional linguists. The third group is the community of Indo-Europeanists, who have an abiding interest in the syntactic history of a principal Indo-European language, and whose concerns for the syntax of the protolanguage will be directly addressed by the contents and approach of this project.

6. Volume 2

The second volume of *New Perspectives on Historical Latin Syntax: Constituent Syntax: Adverbial Phrases, Adverbs, Mood, Tense* contains four chapters. Material from this volume generally concentrates on phrasal or sub-sentential phenomena. By sub-sentential, we mean grammatical, specifically syntactic, phenomena which are manifest in structural configurations associated with one or another of the constituents which make up the sentence. Mood and modality are among the most obvious constituent-based linguistic categories, since they directly encode the speaker's attitude toward the truth or falsity of the proposition, among other things (possibility, doubt, definiteness, vagueness, and so on) onto the predicate constituent of the sentence. Other topics in this volume reflect constituent syntax to varying degrees. For example, the univerbation of the phrase *potis sum* into the verb *possum* 'be able' is an example of the intersection of formal and semantic change which

has consequences for constituent and lexical structure in that the expression changes from a phrasal to a lexical expression.

As in the first volume (*Syntax of the Sentence*), we provide a brief summary of the contents of this volume. These summaries are designed only to inform the reader of the content and main claims of the chapters. For the details, we encourage you to read on; we assure you that you will find it worth the effort.

Silvia Luraghi in her chapter "Adverbial Phrases" explores noun phrases and prepositional phrases which function as adverbials, especially those which indicate spatial relations. She works out a classification of semantic roles of adverbial constituents such as location, direction, source and path, proposing a hierarchically ordered set of relations in which abstract semantic roles are mapped onto the spatial plane. Luraghi's account postulates a functionally motivated account of the development and case-encoding of semantic roles in the history of Latin.

In his chapter entitled "Adverbs", Davide Ricca addresses the question of non-nominal modifiers. Ricca considers Latin adverbs to be an open word class, and provides an outline of the adverb-forming morphological devices available in Latin with some discussion of gradation and evaluation. He considers adverbs to be polyfunctional, and offers some considerations on their diachronic semantic development. Ricca treats adverbs as autonomous predications, and evaluates their use in coordination and argument structure. This leads to a consideration of the adverb-preposition continuum, with its diachronic implications in terms of grammaticalization, and concludes with an examination of the development of the adverb as a word class in Romance languages.

In her chapter "Mood and Modality", Elisabetta Magni deals with a notoriously difficult area to treat in typological perspective, namely mood and modality. She argues that much insight can be gained into the Latin system by taking into account both the concepts of deontic and epistemic modality, as well as the *realis/irrealis* dimension. Magni argues further for the inclusion of necessity, possibility and intention in the analysis of Latin modal markers. She merges these criteria into a complete whole from a functional-typological viewpoint and a diachronic perspective.

In "Actionality, Tense and Viewpoint", Gerd Haverling treats the intricate interplay among the three verbal categories of tense, actionality (also known

as *Aktionsart*) and viewpoint (also known as aspect). After deftly untangling the terminological uncertainties in this area, she traces developments from Proto-Indo-European up until the Late Latin period, investigating scores of Latin authors through copious examples. Haverling places the Latin system in its typological place by assessing it as one which differs in some respects from its Proto-Indo-European ancestor (for example in the loss of the aorist and the demotion of viewpoint), but which evolves into something quite different in the Late Latin period.

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Silvia Luraghi

Adverbial Phrases

1. Formal and syntactic aspects

Adverbials are sentence constituents not required by the verbal valency. In Latin, several types of constituent can carry the function Adverbial,[1] namely, noun phrases, prepositional phrases, adverbs, and subordinate clauses. In the present chapter, I limit myself to the description of the syntax of noun phrases and prepositional phrases functioning as adverbials.

In principle, adverbial modifiers included in this chapter are NPs and PPs not required by the valency of the verb. Note, however, that the status of a NP or a PP as argument or adverbial is not always easy to decide. In particular, NPs and PPs expressing local relations are often complements of certain verbs, and they are syntactically closer to arguments than to adverbials. Cabrillana (1997a, 1997b) discusses the syntactic function of NPs and PPs that co-occur with *eo* and *uenio* and denote Direction. Based on her data, such constituents would profit from a scalar definition of syntactic functions. In the present chapter, I take into account all types of NPs and PPs denoting spatial relations, even in cases where they belong in the valency of the verb, because they are often formally identical to adverbials bearing the same semantic roles. However, some formal differences do emerge: for example, the so-called "dative of approach" is virtually limited to the complements of certain verbs, mostly compounds such as *appropinquo*.[2] Furthermore, plain cases in spatial expressions occur more easily on the Argument level than on the Adverbial level, as for example in the case of the plain ablative, which occurs without lexical restrictions on the NP in Source expressions limited

1. Names of grammatical relations and semantic roles are capitalized when they refer to the function and not capitalized when they refer to a specific instantiation of the function.
2. See Hofmann & Szantyr (1965: 98–99) and Van Hoecke (1996); see further example (28) below.

to verbs that requires a Source expression (for example, with verbs that have a prefix like *de-* or *a(b)-*). In other cases, such as with certain toponyms, it occurs as an Adverbial (see the discussion of (6) below).

Typical adverbials occur in (1)–(2):

(1) Caes. *Gall.* 5,50: ***prima luce*** *hostium equitatus ad castra accedit*
'at dawn the enemy's cavalry reached the camp'

(2) Caes. *Gall.* 5,46: *exit* ***cum nuntio*** *Crassus*
'Crassus left with the ambassador'

In (1) an NP, *prima luce*, gives information about the temporal setting of the event. In (2) a PP, *cum nuntio*, modifies the verb phrase: it adds information regarding the participant that accompanies the agent. Adverbials of the type in (1) and (2) are also called "adjuncts".

Adverbials that modify a whole sentence are called "disjuncts". As shown by Pinkster (1995: 40–46), disjuncts form a heterogeneous class; often, we find adverbs or clauses in the function disjunct. An example of an NP, also given by Pinkster (1995: 42) is (3):

(3) Sall. *Iug.* 24,2: *non* ***mea culpa*** *saepe ad uos oratum mitto*
'it is not my fault that I often address an appeal to you'

2. Semantic roles of adverbials

In the remainder of this chapter, I describe various types of adverbials following a classification of semantic roles worked out in Luraghi (2003a), mostly on the basis of Ancient Greek data. Not all possible semantic roles are grammaticalized in any language: accordingly, the classification that I adopt in this chapter is a revised version of Luraghi (2003a), based on what appears to be relevant for Latin. One of my basic assumptions, which has been demonstrated in detail for Latin by de la Villa (2001a), is that semantic roles are prototypical categories. The prototypical nature of semantic roles implies that various possible adverbials cannot be rigidly classified and forced into a certain category; in the meantime, it is of doubtful value to multiply semantic roles based on a set of rigidly distinguished features. It seems much more

fruitful to allow for nonprototypical instantiations of semantic roles, in cases where a certain expression only meets part of the requirements for prototypical items.

I further assume that markers of semantic roles, that is, cases and adpositions, are meaningful elements and explain their usually high degree of polysemy in terms of affinities among semantic roles. I take the domain of space as basic for human cognition; consequently, I assume the use of cases and adpositions in local expressions to be basic and view their uses in more abstract domains as derived from their local meaning through metaphoric or metonymic processes. Following the terminology current in cognitive grammar, I describe the relation denoted by a certain case or adposition as holding between a foregrounded entity (the trajector, or figure) and a backgrounded one (the landmark, or ground).[3]

Finally, it must be stressed that this is not a full list of all the most relevant semantic roles, but that it only includes the semantic roles possibly assigned to adverbials; in any case it does not include the semantic roles of constituents that are treated elsewehere in this volume. In particular, I do not discuss such semantic roles as Patient, Recipient/Addressee, and Possessor.

3. Space

The spatial relations discussed in this section include Location, Direction, Source, and Path. Syntactically speaking, these four semantic roles are not all, and not always, on the same plane. In particular, Location is possibly argumental with verbs like ‘be’, ‘stand’, ‘abide’, as in (4):

(4) Liv. 2,64,10: *cum manere* ***in tentoriis*** *quietum militem iussisset*
‘having ordered the troops to remain calm in their tents’

However, most frequently it is adverbial, as in (5):

(5) Liv. 6,28,5: *dum conscribitur* ***Romae*** *exercitus*
‘while the army is being enrolled in Rome’

3. For this approach to the meaning of prepositions see Taylor (1993) and Luraghi (2003a).

Source and Path seem to be mostly adverbial as well. This holds for Path more than for Source, which may be argumental with verbs that imply motion away from something, as with the verb *expellere* in (6):

(6) Cic. *Att.* 10,4,1: *nisi me* ***ciuitate*** *expulissent*
'if they had not expelled me from the state'

Note that *civitate* is a Source expression in the plain ablative. Usually, Source adverbials take some preposition, such as *ab*, *ex*, or *de*, unless they contain certain toponyms. The occurrence of the plain case in this example is made possible by the verbal meaning. This points toward a different syntactic status of this Source expression with respect to those where prepositions occur: most likely *ciuitate* in (6) is an argument of the verb, rather than an adverbial.

Direction mostly seems to be argumental, since it typically occurs with motion verbs, which are often held to be bivalent predicates.[4] A typical Direction expression is *ad castra* in (1). The verb *accedo* in the meaning 'to reach, to get close' occurs only once without any Direction expression in Caesar (see Meusel 1887, s.v.). Most often, the Direction expression is a PP with *ad*, as in this case; at other times it can be a local adverb. Under such circumstances, the Direction expression is more like an argument than an adverbial.

Direction > Location > Source > Path

Argument (Complement) ————————————→ Adverbial

Figure 1. Syntactic functions of spatial expressions

From the above remarks, one can draw a scale along which NPs and PPs denoting local relations are closer to arguments or to adverbials (Figure 1).[5]

An interesting issue raised by Latin in the field of spatial relations is the use of plain cases versus PPs. It is well known that plain cases only occur with some toponyms and a restricted number of other nouns, mostly with spatial reference, and that their use partly involves retention of an otherwise

4. See Cabrillana (1997a, 1997b).
5. For a definition of the syntactic function Complement, see Cabrillana (1997a).

lost case, the locative. The issue is further complicated by the fact that the locative only survives in the first and second declension (in which it merges with the genitive), while nouns of the third declension use the ablative in its place. So for nouns of the third declension, the ablative can express Location and Source (this happens to some extent in the second declension, too, see Section 3.1). With this situation one would expect an increase in the use of prepositions; however, this is apparently not the case until very late: in some semantic roles (e.g., Source with nouns that denote spatial regions), the use of plain cases increases after Plautus.

3.1 Location

Location denotes the physical place at which a state of affairs takes place. In Latin, it can be expressed through an NP in the locative or ablative, or through a PP.

The locative case in Latin is limited to the singular of *-ā-* and *-o-* stems and is only used for certain toponyms (city names and names of small islands); some other locative forms are attested for nouns of other inflectional classes, mostly with spatial reference, such as *domi*, *humi*, and *ruri*. The use of the plain ablative as a locative outside toponyms is very limited: handbooks only report as ancient the form *loco* (an example is in (60) below). Later, some other words that denote spatial regions also started to be used in Location expressions in the plain ablative, as *parte, regione* (cf. Hofmann & Szantyr 1965: 145):

(7) Caes. *Gall.* 7,13,3: *Caesar ad oppidum Auaricum, quod erat maximum munitissimumque in finibus Biturigum atque agri* ***fertilissima regione****, profectus est*
'Caesar marched to Avaricum, which was the largest and best fortified town in the territories of the Bituriges and situated in a most fertile tract of country'

(But note that the ablative *fertilissima regione* is coordinated with a prepositional phrase.)

At a very early stage, the locative of *-o-* stems started to be replaced by the ablative even with city names; retention of the locative case is more consistent

for *-ā-* stems.[6] As an effect, as I remarked in Section 3 above, to a certain extent city names could present no formal distinctions between Location and Source, which could also be expressed by the plain ablative.

In addition, already in Early Latin PPs can be found in Location expressions with nouns that also have a locative, as in (8):

(8) Plaut. *Epid.* 541: *plane hicine est, qui mihi **in Epidauro** primus pudicitiam pepulit*
'surely it is he, who first violated my maiden modesty in Epidaurus'

The spatial preposition that expresses Location and does not add any further semantic specification to what could also be expressed by the locative case is *in* with the ablative. Equivalence is demonstrated by occurrences with attributes and adpositions. In Early Latin, we find expressions such as *in urbe Roma*, or *in urbem Romam*; later, when the apposition also takes an adjective, PPs with *in* and the ablative can be apposed to locatives (the same holds for *in* with the accusative in Direction expressions):

(9) Cic. *Rab. Post.* 26–27: *non in hortis aut suburbanis suis, sed **Neapoli, in celeberrimo oppido***
'not in their country seats or their suburban villas, but in Naples, a much-frequented town'

As argued in studies on equivalents of the preposition *in* in other languages, this preposition denotes a relation in which a trajector occupies a portion of the same space occupied by the landmark.[7] Coincidence in space between a portion of the trajector and a portion of the landmark appears to be the unmarked option for Location in Latin. Other Location expressions usually add some specification as to the reciprocal position of the trajector and the landmark. For example, the preposition *ad* denotes Location in the vicinity of a landmark (or it may denote Direction, see below).

6. According to Löfstedt (1956: 75), replacement of the locative by the ablative in the second declension was already common in the second half of the 1st century BCE; *-ā-* stems, on the other hand, consistently retained the locative until as late as the 4th century CE.
7. See Vandeloise (1994), Cuyckens (1993), and Luraghi (2003a).

Most prepositions can occur in Location or Direction expressions, without case variation, except *in*, *sub*, and *super*. When case variation exists, the ablative consistently occurs in Location expressions and the accusative in Direction expressions; however, the evidence of other space prepositions gives the impression that case variation was redundant for the distinction between Location and Direction:[8]

(10) Cic. *Quinct*. 96: *quorum saepe et diu* ***ad pedes*** *iacuit stratus*
'at whose feet he often lay, and that for a long time'

(11) Cic. *Verr.* I 1,45: *ipse denique Cn. Pompeius cum primum contionem* ***ad urbem*** *consul designatus habuit*
'lastly, Gnaeus Pompeius himself, when first he delivered a speech by the city walls as consul elect'[9]

(12) Cic. *Verr*. I 1,23: *eadem illa nocte* ***ad me*** *uenit*
'he came to me on the same night'

Direction with human referents, as in (12), could not be denoted by *in*, which in such cases means 'against' or less frequently 'for' (see Sections 7.1 and 7.3 below).

Furthermore, outside concrete Location, the accusative sometimes occurs where one would expect the ablative. This happens as early as Plautus:[10]

(13) Plaut. *Amph*. 180: *numero mihi* ***in mentem*** *fuit*
'I had that number in mind'

(14) Cic. *div. in Caec*. 66: *quae* ***in amicitiam*** *populi Romani* ***dicionemque*** *essent*
'which are allies and subjects of the Roman people'

8. See Luraghi (1989).
9. Note that a translation 'when first he delivered an address to the people as consul elect', which would imply that *ad* denotes Addressee, is not accurate: indeed, *ad* denotes location close to the landmark, but not inside it. Pompeius, as a military commander (he had just come back from Spain), could not at that moment enter the city and had to deliver his speech outside the walls.
10. See Hofmann & Szantyr (1965: 276), where more examples are quoted.

(See further the expression *in potestatem esse* ‘to be in control’ from legal texts.)

Polysemy involving Location and Source occurs as well, in cases where Source expressions denote distance, where it is said that a trajector is located away from a landmark. For example, the preposition *ab* with the ablative can, to a limited extent, encode Location as well as Source, as we will see in Section 3.3; cf. (15):

(15) Liv. 5,6,4: *adeone effeminata corpora militum nostrorum esse putamus, adeo molles animos, ut hiemem unam durare in castris, abesse* ***ab domo*** *non possint?*
‘are we to suppose that the bodies of our soldiers are so effeminate and their spirits so enfeebled that they cannot hold out in camp or stay away from their homes for a single winter?’

In this occurrence, the use of a Source expression can be explained through the notion of “fictive motion” (Talmy 2000: 136): a location is referred to in terms of the trajectory that would lead from it to a reference point, if the trajector moved. Note that the verb *abesse* also indicates distance in (15).

A further step in the reanalysis of Source expressions as Location occurs in cases where the distance is not expressed by another element in the sentence. As remarked in Hofmann & Szantyr (1965: 255–256), the locative usage of *ab* is especially frequent in a number of expressions, such as *a parte, a dextra (laeua)*, *a tergo*, which refer to a side of a landmark:

(16) Liv. 2,65,2: *quamquam cessere magis quam pulsi hostes sunt, quia* ***ab tergo*** *erant cliui, in quos post principia integris ordinibus tutus receptus fuit*
‘but the enemies withdrew, rather than be pushed away, because behind them were hills, which offered a safe shelter to which they retreated in good order behind the first lines’

(17) Matth. 27,38: *tunc crucifixi sunt cum eo duo latrones unus* ***a dextris*** *et unus* ***a sinistris***
‘then there were two robbers crucified with him, one on his right hand and one on the left’

The notion of distance found in (15) is no longer active in (16) and (17) (*ab tergo* in (16) does not mean 'far from their back', but simply 'behind them'), and the prepositional phrases with *ab* simply denote Location on a certain side relative to a landmark. Note that this usage is lexically conditioned, so it does not generate ambiguity with possible Source expressions or expressions where *ab* denotes location at a distance.[11]

Among spatial prepositions, *apud* (with the accusative) deserves some attention. Its meaning is similar to the meaning of *ad*: as opposed to *in*, it denotes vicinity of the trajector and the landmark, and no coincidence in space. However, the handbooks remark that both *ad* and *apud* can occur in contexts where one would expect *in*, already in Plautus. Hofmann & Szantyr (1965: 224) quote the following example:

(18) Plaut. *Amph.* 1011–1014: *nam omnis plateas perreptaui, gymnasia et myropolia / **apud emporium** atque in macello, in palaestra atque in foro / in medicinis, in tonstrinis, **apud omnis aedis sacras** / sum defessus quaeritando*
'for through all the streets have I crawled, the wrestling-rings and the perfumers' shops, to the market, too, and in the butcher shop, the school for exercise, and the Forum, the doctors' shops, the barbers' shops, and among all the sacred buildings, I am tired of looking for him'

Because *emporium* is not a frequent word in Location expressions (*ThLL s.v.*), it is hard to say whether the occurrence of *apud* here may be triggered by the co-occurrence of this specific lexical item (note further the occurrence of *apud* with *aedis sacras* in the same passage).[12]

As they do not denote coincidence of the trajector with a portion of the landmark, both *ad* and *apud* are especially suited to indicating a spatial relation relative to a human landmark. Close connection with human referents on the side of *apud* brought this prepositions to eventually encode Comitative

11. The semantics of *ab* in such Location expressions is also discussed in De Felice (1954: 267–271), with various examples.
12. The expression *apud aedis sacras* is particularly frequent, as also remarked in Hofmann & Szantyr (1965: 224).

in some Vulgar Latin/Early Romance varieties, as shown by some of the Romance languages (notably Gallo-Romance), in which it eventually replaced *cum*.[13] Such development may have had a starting point in occurrences such as (19), where *apud* with a human landmark means 'at one's place':

(19) Catull. 13,1–2: *cenabis bene, mi Fabulle,* ***apud me*** *paucis, si tibi di fauent, diebus*
'you will feast well with me, my Fabullus, in a few days, if the gods favor you'

Example (20) is quite typical, in the Classical authors, of the use of *apud* with plural nouns, with the meaning 'among'; in (21) 'to be *by* oneself' denotes a mental or emotional state:

(20) Sall. *Catil.* 9: *ius bonumque* ***apud eos*** *non legibus magis quam natura ualebat*
'justice and probity prevailed among them, thanks not so much to laws, as to nature'

(21) Ter. *Andr.* 408: *proin tu fac* ***apud te*** *ut sies*
'take care to be yourself'

(On the use of *apud* in Direction expressions see Section 3.2.)

3.2 Direction

Direction is the semantic role of a landmark that denotes the direction or endpoint of a trajectory. As in the case of Location, city names, names of small islands, and a few nouns with spatial reference require less morphological marking in Direction expressions and occur in the plain accusative, rather than with the preposition *in* and the accusative:

(22) Cic. *epist.* 3,8,3: *ut eorum causa legationes* ***Romam*** *uenirent*
'that deputations had come to Rome on their behalf'

13. The Modern French preposition *avec* is not a direct reflex of *apud*, but it replaced another preposition, *op*, that occurs in Old French and regularly derives from *apud*; see Bloch and von Wartburg (1964) *s.v.* and Beckmann (1963: 269 ff.).

(23) Liv. 3,33,5: *his proximi habiti legati tres qui* ***Athenas*** *ierant*
'next to them were placed the three commissioners who had gone to Athens'

It must be stressed that prepositional phrases with city names occur in Early Latin, in places where one would expect the plain accusative; the rule that city names only took the plain case, much as for Location expressions, seems to be more consistent in Classical Latin. Comparing Early with Late Latin, one has the impression that spatial relations with city names could be variously encoded through plain cases or (various) PPs. If one only takes into account Classical prose writers, on the contrary, prepositions with city names are virtually absent. In Plautus's *Miles Gloriosus* the ratio of PPs with *in* plain cases (counting together Location and Direction expressions) is 1/6, in Caesar's *De bello Gallico* there are no instances of PPs, and in John's Gospel the ratio is 2/3: the change is dramatic even if we match the data from the new Testament with that of Early Latin. However, the evidence points toward the extension of a variant that already existed, rather than toward a complete innovation. The latter would be the conclusion if we had only the data from the Classical language available for contrast with Vulgar Latin.[14]

Some uses of *ad* in Direction expressions are also interesting. This preposition occurs with animate and inanimate nouns; in the case of animate nouns, it is sometimes thought to be interchangeable with the plain dative, in a somewhat puzzling manner. Let us first examine some examples:

(24) Caes. *Gall.* 3,19,3: *illi . . . legatos* ***ad Crassum*** *mittunt seque in deditionem ut recipiat petunt*
'they send ambassadors to Crassus and ask him to accept them as subjects'

(25) Caes. *Gall.* 6,32,1: *nihil se de bello cogitauisse, nulla* ***Ambiorigi*** *auxilia misisse*
'that they had formed no plans of war, and had sent no auxiliaries to (*or:* for) Ambiorix'

14. Regarding the data from the New Testament, one must further remark that most city names do not have a regular Latin inflection, which may favor the use of PPs rather than plain cases. The use of the plain case with a city name such as *Roma* certainly survived much longer, see Väänänen (1981).

In the case of the verb *mittere*, if the landmark is human, *ad* is more frequent than the plain dative in general and much more frequent when the object of the verb is animate (e.g., in the case of *legatos mittere*). In (25), the dative *Ambiorigi* can be taken to be a Beneficiary rather than a Recipient. If the landmark is not a human being one finds PPs with *ad* (see *ad bellum* in (73) below) or *in*, or the plain accusative:[15]

(26) Caes. *civ.* 1,6,3: *Faustus Sulla pro praetore* ***in Mauretaniam*** *mittatur*
'that Faustus Sulla should be sent as propraetor into Mauritania'

There are other types of expression that attest to a similarity between the dative and Direction expressions, especially in metaphorical senses. For example, in the Classical prose writers one finds both *auxilio mittere* and *in auxilium mittere*. However, as noted in the handbooks, the extent to which the plain dative can encode Direction is very limited with intransitive motion verbs (such as *ire* and *uenire*). In any case, the occurrence of *ad* with *mittere* and human referents does not seem to be a trace of a weakening of the dative as the case of the indirect object: most likely, the dative with *mittere* is not an indirect object of the same type as the third argument of *dare*, as shown by the fact that it can very often be missing, and that it can be replaced by a Direction expression, as in (26), which would be impossible with *dare* (or would activate a different meaning of the verb).

I would like to suggest that there is a difference in semantic roles mirrored by the alternate use of the plain dative, or of *ad* with the accusative: while the former denotes Recipient, the latter denotes Direction. The occurrences of each type of expression are summarized in Table 1.[16] Verbs of giving and of communication, which normally take an indirect object in the dative, can, under certain circumstances, also occur with *ad* and the accusative. Pinkster quotes a number of examples from Plautus, among which is (27):

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15. The distribution of the dative versus *ad* with the accusative with *mittere* is also studied in Baños Baños (1996); on alternative use of plain cases or PPs in Cicero, see further Théoret (1982).
16. The count is based on a corpus that includes Caesar's *de bello civili* and Cicero's *epistulae ad familiares*. I have not included occurrences where *mittere* only takes a direct object and occurrences of such expressions as *auxilium mittere* and *mittere pila*.

Table 1. Semantic roles with *mittere*

Trajector	Landmark	Marker	Semantic role
+human	+human	*ad* dative	Direction 36 % Recipient 4 %
−human	+human	*ad* dative	Direction 14 % Recipient 14 %
−human	−human	*in*, *ad*	Direction 32 %

(27) Plaut. *Capt*. 360: *quae* ***ad patrem*** *uis nuntiari*
‘the things that you want to be reported to your father’

According to Pinkster, “The *ad* expression conveys the idea of transportation towards someone, whereas the dative would mean ‘to communicate to’ … [with *ad*] *nuntiare* … may be regarded as [a] two-place [verb] with an optional *ad* satellite” (1990: 202). In other words, these verbs can have different valencies; when used with a PP they are bivalent and the PP is not an argument. This fact, along with the greater meaningfulness of the preposition with respect to the plain dative, highlights the aspect of transfer included in the verbal meaning. In the case of verbs of giving, the idea of ‘transportation’ follows directly from the state of affairs: a concrete referent is transferred from an agent to a recipient.[17] The schema of such verbs is extended to verbs of communication through the “conduit metaphor” (see Reddy 1979): words or messages are conceived as objects which are moved during the act of communication.

For the most part, examples of the plain dative in Direction expressions can hardly be qualified as adverbials, because they are connected with some specific verbs, such as *appropinquare*, which are perhaps bivalent:

17. Note further that English does not especially help us to understand the possible difference between the dative and *ad*, since in English both Recipient and Direction are marked by *to*. This is not the case in many other languages, e.g. Italian or French, in which the difference between the two Latin expressions, at least with verbs such as *mittere,* can often be reflected in the translation. See also Baños Baños (2000).

(28) Caes. *Gall.* 7,47,3: *neque finem prius sequendi fecerunt quam* ***muro*** *oppidi* ***portisque*** *appropinquarunt*
'nor did they put an end to the pursuit, until they drew close to the wall of the town and the gates'

A frequently quoted (and isolated) poetic example which involves *ire* is:

(29) Verg. *Aen.* 5,451: *it clamor* ***caelo***
'the noise rises toward the sky'

We have seen in Section 3.1 that most space prepositions could occur in both Location and Direction expressions with the same case, the accusative. In the case of animate nouns, there were some attempts by the Latin grammarians to give precise rules in order to avoid ambiguity between the two semantic roles: in particular, concerning the difference between *ad* and *apud*, the grammarians tried to favor the use of *ad* for Direction and *apud* for Location. However, as early as Plautus there is evidence that *apud* was indeed used for Direction as well (see Bennett 1914: 230–236). On the other hand, *ad* occurred in Location expressions mostly with inanimate landmarks, while its use with animate ones seems to conform more closely to the rule of the grammarians (see (12) and (35)).

In Section 3.1 I mentioned the possibility of Source prepositions encoding Location. Here it must be noted that no preposition can apparently encode both Direction and Source, with or without case variation.

3.3 Source/Origin

Source is the place from which a trajector moves along a trajectory. It can be variously conceived, depending on the initial position of the trajector relative to the landmark. In Latin, Source is mostly coded by means of three prepositions, *ex* 'out of', which denotes initial coincidence of the trajector with a portion of the space occupied by the landmark; *de*, which denotes motion from the vicinity of a landmark; and *ab*, which is neutral in this respect. Again, with city names, names of small islands, and, sporadically, names of countries, Source can be expressed through the plain ablative case rather than through a PP (see Bennett 1914: 288–289; Hofmann & Szantyr 1965: 102):

(30) Plaut. *Rud*. 35: *senex qui huc* ***Athenis*** *exsul uenit*
'an old gentleman who has come to this place as an exile from Athens'

(31) Plaut. *Curc*. 225: *paues, parasitus quia non rediit* ***Caria***
'you are anxious because your Parasite has not returned from Caria'

The use of the plain case for Source with city names seems more consistent than the use of plain cases for Location and Direction: apparently, *ab* is used only when both Source and Direction expressions occur, and this seems to hold in Early Latin already. In Early Latin, all combinations of plain cases or prepositional phrases occur in such contexts:

(32) Plaut. *Truc*. 91: *nam ego* ***Lemno*** *aduenio* ***Athenas*** *nudius tertius*
'now I arrived at Athens the day before yesterday from Lemnos'

(33) Plaut. *Mil*. 384: *uenisse* ***Athenis in Ephesum*** *cum suo amatore quodam*
'that she came from Athens to Ephesus with a certain lover of hers'

(34) CIL I 551: *uiam feci* ***ab Regio ad Capuam***
'I took a journey from Reggio to Capua'

Already from an early stage, *de* tended to extend to occurrences where one would expect *ab*, and later also to those where one would expect *ex*.[18] As remarked by Hofmann & Szantyr (1965: 262–264), this usage, possibly common in the spoken language, was resisted by the grammarians. It eventually took over, as testified by the Romance languages, in which there are scarcely any remnants of *ab* and *ex*.

Origin is an abstract semantic role, metaphorically derived from Source. The (concrete or abstract) origin of a trajector is conceived as a place from which the trajector moves away (cf. Luraghi forthcoming a). Example (35) demonstrates the link between Source and Origin:

(35) Caes. *civ*. 1,35,1: *euocat ad se Caesar* ***Massilia*** *XV primos*
'Caesar summons fifteen of the chiefmen from Massilia'

18. Note that the replacement of *ex* by *de* started later, but in the Vulgar Latin texts it looks further advanced than the replacement of *ab*.

In (35) it is said that people are summoned from the city of Massilia (Source); however, the same people also originate from Massilia (Origin).

Bennett (1914: 289) also mentions the fact that "on coins the name of the town whence the coin came is sometimes indicated by the town name in the ablative". In such cases, as well as in (35), closeness of Source and Origin is particularly clear. But with the verb 'to be born' there is no need to imply any type of motion:

(36) Plaut. *Amph.* 28: ***humana matre*** *natus,* ***humano patre***
'born of a human mother, of a human father'

(37) Sall. *Catil.* 5,1: *L. Catilina,* ***nobili genere*** *natus*
'Lucius Catilina, offspring of a noble family'

Among Source prepositions, *ex* appears most suitable for extension to Origin, most likely because of its specific meaning ('out of'). This preposition regularly occurs both in Early and in Classical Latin with personal pronouns (cf. Bennett 1914: 292) and frequently also with NPs of any type:

(38) Ter. *Haut.* 1030: *ita mihi atque huic sis superstes ut* ***ex me*** *atque* ***ex hoc*** *natus es*
'so may you be the survivor of me and of him, you are my son and his'

Closely connected with Origin is Matter, also commonly encoded by *ex*, as in *pharetra ex auro*, 'a golden quiver' (Verg. *Aen.* 4,138); see further (39):

(39) Verg. *georg.* 3,26: *in foribus pugnam* ***ex auro solidoque elephanto*** *Gangaridum faciam*
'of gold and massive ivory on the doors I'll trace the battle of the Gangarides'

According to Lakoff and Johnson, the common connection between Origin and Matter is based on a metaphor, according to which "the object comes out of the substance" (1980: 73).

Another semantic role connected with Origin and Matter is Partitive, based on the metaphor according to which "wholes are origins" (see Nikiforidou 1991):

(40) Hor. *sat*. 1,4,123: *unum* ***ex iudicibus selectis*** *obiciebat*
'he indicated one of the special judges'

In the classical literary language, *ab*, *ex*, and *de* are generally kept distinct in a quite consistent manner. For example, in Cicero's *Verrinae*, *ab* denotes Source, mostly with human referents, as in (41); it occurs with verbs that express a request, as in (42), with adjectives denoting absence of something, and in Location expressions that contain adverbs with the meaning 'far from', as in (43); elsewhere (in the majority of occurrences), it denotes Agent with passive verbs. The preposition *ex* denotes Origin, as in (44), often referring to a source of information, as in (45), as well as Time; it also occurs in Source expressions with certain verbs, such as *tollo* and *subfero*, as in (46), or where it means 'out of', and is used in partitive expressions, as in (47). In its turn, *de* occurs in Source expressions virtually limited to verbs with the prefix *de-*; in most occurrences it denotes Area (for a definition of Area see Section 10). Partitive is also possibly expressed by *de* in Cicero, as shown in (48), though to a more limited extent than by *ex*.

(41) Cic. *Verr*. II 5,146: *eos sertorianos milites esse atque* ***a Dianio*** *fugere dicebat*
'he used to say that they were soldiers of Sertorius, and that they were fleeing from Dianium'

(42) Cic. *Verr*. II 1,98: *impetrat* ***a senatu*** *ut dies sibi prorogaretur*
'he prevails on the senate to grant him an adjournment'

(43) Cic. *Verr*. II 3,75: *summorum aratorum remotissimorum* ***a foro, iudiciis, controuersiis***
'of excellent agriculturists, men most remote from courts of law, from tribunals, and from disputes'

(44) Cic. *Verr*. II 2,185: *his exportationibus quae recitatae sunt scribit sestertium sexaginta milia socios perdidisse* ***ex uicensima*** *portorii Syracusis*
'by these exports, of which the list was read to you, he writes that the shareholders had lost sixty thousand sesterces by the five per cent due on them as harbor dues at Syracuse'

(45) Cic. *Verr.* II 2,179: *uos **ex me** causam non a me prolatam, sed ad me delatam audire oportere*
‘and that you ought to hear the cause not as it might be produced by me, but as it has been brought to me’

(46) Cic. *Verr.* II 1,45: *quas tabulas pictas **ex Achaia** sustulerit*
‘what paintings he carried off from Achaia’

(47) Cic. *Verr.* II 2,183: *de ceteris **ex hoc** coniecturam facere debebitis*
‘and by this you will be able to form your conjectures as to the rest’

(48) Cic. *dom.* 117: ***de conlegio** quis tandem adfuit?*
‘of the college who was present then?’

If we turn to Petronius, chapters 41–46 of the *Satyricon*, which contain speeches of the freedmen and are thought to constitute good examples of the language spoken in the first century CE, the picture changes. In this text, *de* is much more frequent than *ex* and *ab* and has expanded especially to the meanings that *ex* used to express in Cicero. In the *Itinerarium Egeriae*, written in the fourth century CE, *de* has expanded further, especially at the expense of *ex*; *ab* still occurs in all contexts in which it used to occur in Classical Latin but is much less frequent than *de*. Note that the extension of *de* to uses typical of *ex* must have started in the spoken language much earlier: Bennett (1914: 292) quotes an occurrence of *de* with *natus* already from Plautus. While *de* took over some of the functions of *ab* in the domain of local relations in the first centuries CE, the extension to passive agent seems to have started later, as is shown in Section 5.1.1.[19]

Examples of *de* in Petronius and in the *Itinerarium* are given below:

(49) Petron. 44,10: *et quam benignus resalutare, nomina omnium reddere, tanquam unus **de nobis**!*
‘and how friendly he was, returning everyone’s greeting, calling us all by name, just like he was one of us!’

(50) *Itin. Eger.* 11,3: *lectio ipsa **de libris** Moysi lecta*
‘having read this text from the books of Moses’

19. In the short passage from Petronius from which I took the above data, there is one occurrence of a passive agent, encoded, as in Classical Latin, through *ab* with the ablative.

3.4 Path

Path is the semantic role that denotes a region through which or along which a trajector moves along a trajectory. Path seems to be somewhat more complicated than the other spatial roles, as demonstrated by the relative infrequency of a perlative case across languages (see Section 3.5).

There are various types of Path: in the first place, the trajectory can be contained at least in part in the area of the landmark, as in (51):

(51) *I go through the door.*

or it can be completely external to it, as in (52)–(54):

(52) *I walk along the sea shore.*

(53) *The airplane flies across the mountains.*

(54) *The house is across the street.*

In (52) the landmark is conceived as an entity with a spatial extension, which shapes the trajectory along which the trajector moves; in (53) the landmark is crossed over as a whole and is surpassed by the trajectory. The trajectory can be fictive, as in (54). Furthermore, a trajectory can be straight, or unidirectional, as in (51), or it can be multidirectional, as in (55):[20]

(55) *I walk around in the city.*

In the last case, Path is encoded as Location, both in the English example and, often, in Latin.

Both unidirectional and multidirectional paths are normally coded through *per* with the accusative in Latin; examples are (56) (*per Sequanos*) and (57) respectively:

(56) Caes. *Gall.* 1,6,1: *erant omnino itinera duo, **quibus itineribus** domo exire possent: unum **per Sequanos**, angustum et difficile*
'there were in all two routes by which they could go forth from their country: one through the Sequani, narrow and difficult'

20. For a discussion of different types of perlative expressions, and in particular of multidirectional motion, see Luraghi (2003a).

(57) Catull. 101,1: ***multas per gentes*** *et* ***multa per aequora*** *uectus*
'carried through many nations and through many seas'

Multidirectional Path can also be coded as Location, through *in* with the ablative as in (58), or through a locative, as in the expression *terra marique,* 'by land and sea', where the landmark is profiled as a bounded region within which the trajector moves:

(58) Sen. *epist.* 103,5: *non arietant inter se nisi* ***in eadem*** *ambulantes* ***uia***
'they do not bump into each other unless they are walking in the same street'

With some nouns referring to spatial regions which are typically passed through, unidirectional Path can be coded through the plain ablative, as *porta* in (59) and *iugo* in (60):

(59) Hor. *carm.* 3,27,40-42: *imago / uana, quae* **porta** *fugiens* **eburna /** *somnium ducit?*
'a vague shade, which brings sleep while fleeing through an ivory door?'

(60) Caes. *Gall.* 7,45,5: *legionem unam* **eodem iugo** *mittit et paulum progressam inferiore constituit loco*
'he sends one legion to the same hill, and after it had marched a bit, he stations it in the lower ground'

In (60), both Path (*eodem iugo*) and Location (*loco*) are denoted through the plain ablative; the semantic role is disambiguated by the lexical meaning of the nouns involved.

External Path is expressed by the adverbial prepositions *trans* or, less frequently, *praeter* 'across':

(61) Cic. *epist.* 2,15,5: *tuae res gestae ita notae sunt ut* ***trans montem Taurum*** *etiam de Matrinio sit auditum*
'your deeds are so well known that on the other side of Mount Taurus even the story of Matrinius was heard'

(62) Liv. 32,5,11: *maxime idoneum ad muniendum locum credidit esse* ***praeter*** *amnem Aoum*
‘he determined that a site across the river Aous was the most suitable place for a fortified base of operations’[21]

Perlative expressions also occur in the plain accusative. This usage is labeled “accusative of extent” in reference handbooks (see Hofmann & Szantyr 1965: 40–41; Bennett 1914: 229–230):

(63) Plaut. *Bacch.* 832–834: *Sequere hac me, faxo iam scies. :: Quo gentium? ::* ***Tres unos passus*** *:: Vel* ***decem***
‘Follow me this way; I’ll soon let you know. :: Where on earth? :: Only three steps. :: Even ten’

According to Hofmann & Szantyr, this type of perlative accusative was used with motion verbs originally and later extended to occurrences where no motion is implied. Such an extension is already attested in Early Latin and is mostly found with words such as *latus* or *longus*, which require that a certain stretch of space be specified:

(64) Plaut. *Poen.* 837: ***cubitum*** *longis litteris*
‘with a letter of a cubit’s length’

3.5 Typological considerations

Path may have a less central status with respect to the other spatial semantic roles, which are usually described as more “basic”: so Stolz (1992: 30), who considers *Dreigliedrigkeit* (‘three-partedness’) one of the prototypical features of the systems of local cases. *Dreigliedrigkeit* structures the Latin system of local cases to a limited extent. In the case of certain toponyms and a few other nouns, we find three different plain cases (see below). Outside this lexically conditioned area, spatial semantic roles are coded through PPs. With prepositions we find a threefold opposition, again to a limited extent: (i)

21. The preposition *praeter* is mostly used in the abstract meaning ‘besides’; see Torrego (1998).

Source is always expressed by specific prepositions; (ii) Location and Direction can be expressed by the same prepositions, and with only a few of them (notably *in*, *sub*, and *super*) is there an opposition between the ablative = Location and the accusative = Direction within the PP. Most prepositions take the accusative and can express either Direction or Location, depending on the context (usually, the opposition between the two semantic roles is expressed by the verb). See Figures 2 and 3.

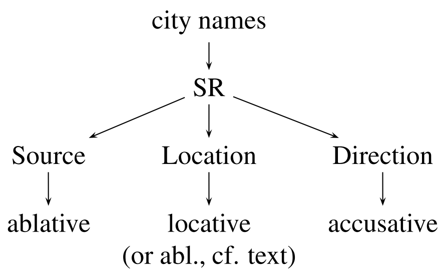


Figure 2. Lexically restricted coding of spatial semantic roles

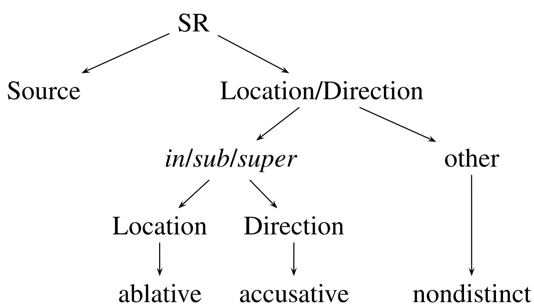


Figure 3. General coding of spatial semantic roles

A closer relation between Location and Direction than either of these semantic roles has with Source is not a language-specific feature of Latin: several studies point out that bipartite systems of local semantic roles involve the occurrence of a specific case for Source plus another case for Direction/Location (see, e.g., Stolz 1992: 17; Andrews 1985: 97; Dixon 2002: 296). It can be interesting to note that some of the Romance languages have reconstructed a *Dreigliedrigkeit*, while others have not (e.g., Spanish

de Source, *a* Direction, *en* Location; in contrast with Italian and French *da*, *de* Source; Direction is the same as Location).[22]

With city names, the issue is further complicated by the fact that the locative only survives in the first and second declensions, with nouns of the third declension using the ablative in its place. So for nouns of the third declension, the ablative can express Location, Source, and even Path. With this situation one would expect an increase in the use of prepositions; however, this is apparently not the case until very late: in some semantic roles (e.g., Source with nouns that denote spatial regions) the use of plain cases increases after Plautus. In some cases, with city names and nouns denoting spatial regions there is an alternative organization; see Figure 4. The only generalization made possible by the concrete usage of cases in spatial expressions is that Source and Direction are consistently kept distinct, while Location has closer links to Direction but can occasionally also be nondistinct from Source.

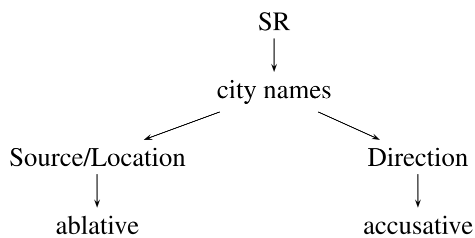


Figure 4. Coding of spatial semantic roles with third declension city names

3.6 Diachronic considerations

The tripartite system of Figure 2 for local relations only really held for some city names and names of small islands. Even the partial tripartite system of Figure 3 only held for a limited number of prepositions in Classical Latin. As we have seen in Section 3.1, abstract location could be encoded with *in*

22. The fact that Italian *da* can also express Location and Direction is irrelevant here, because it is conditioned by its occurrence with human nouns (and in any case, it confirms the tendency to have Location and Direction expressed by the same preposition in Italian). Note that with such nouns, *da* does not express Source.

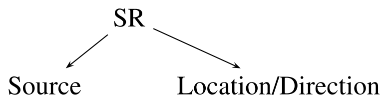


Figure 5. Coding of spatial semantic roles after the second century CE

and the accusative, similar to motion, centuries before the beginning of the ablative/accusative merger. According to Hofmann & Szantyr (1965: 277), confusion in the use of the two cases with *in* was complete by the 2nd century CE.[23] The result is a system in which Location and Direction are no longer distinct; see Figure 5. The Romance languages in which the two semantic roles are kept distinct by means of different prepositions, such as Spanish (in which *en* is used for Location and *a* for motion), have reconstructed this distinction later. In some others, such as Italian, the distinction has disappeared completely, and it would be impossible to distinguish a sentence such as (65) from a possible *in Asiam ductauerat*, if not through contextual knowledge:

(65) Sall. *Catil.* 11: *exercitum quem* ***in Asia*** *ductauerat*
'the army that he led (while he was) in Asia'

As opposed to the partial or total fusion of Location and Direction, the distinction between either of them and Source is much more consistent. Polysemy involving Source and Location is only attested for city names and some other nouns with spatial reference to a limited extent; furthermore, Source prepositions can under certain circumstances express Location, either with the meaning 'away from' or under lexical constraints. Polysemous markers denoting both Source and Direction do not occur. In the field of ablatival relations, one can further observe the ongoing replacement of *ab* and *ex* by *de* (which also replaced the genitive case).

23. In the letters of Claudius Terentianus, who lived during the 2nd century CE, the accusative often occurs with prepositions that took the ablative in Classical Latin; see Adams (1977).

4. Time

Several scholars have observed that Time is most often conceived in terms of spatial relations – that is, that markers of spatial relations very often undergo semantic extensions that make them capable of expressing Time (the contrary process is very seldom attested); see Haspelmath (1997) for a survey.

Transposition of space expressions to Time also occurs in Latin; in general, because Time expressions most often contain nouns that have temporal reference, examples without prepositions have a wider use than for space. Furthermore, while the ablative can be shown to denote a metaphorical location in time, the accusative does not denote a metaphorical direction, but rather a duration in time. The semantic extension is based on the perlative value of the accusative. Examples of plain cases in Time expressions are the following:

(66) Sall. *Iug*. 5,4: ***bello Punico secundo***, *... Masinissa rex Numidarum in amicitiam receptus a P. Scipione ... multa et praeclara rei militaris facinora fecerat*
'in the second Punic war, Masinissa, king of the Numidians, being received into alliance by Publius Scipio, had performed many eminent exploits in the field'

(67) Cic. *epist*. 1,2,1: ***eo die*** *nos quoque multa uerba fecimus*
'on that day we too talked a lot'

(68) Caes. *Gall*. 1,31,4: *hi cum tantopere de potentatu inter se* ***multos annos*** *contenderent*
'for many years they were struggling vehemently with one another for superiority'

Virtually all prepositions that occur in Space expressions can also denote Time in various ways. A few examples may suffice:

(69) Lucr. 1,26–27: *Memmiadae nostro, quem tu, dea,* ***tempore in omni*** *omnibus ornatum uoluisti excellere rebus*
'for our Memmius, whom you, O goddess, wanted to be peerless in every grace at every hour'

(70) Frontin. *aq.* 1,6: ***post annos quadraginta*** *quam Appia perducta est*
‘forty years after Appia was brought in’

(71) Caes. *Gall.* 1,20,5: *monet ut* ***in reliquum tempus*** *omnes suspiciones uitet*
‘he warns him for the future to avoid all grounds of suspicion’

5. Causal roles

Causal roles are semantic roles taken by the participant(s) that initiate or have a part in bringing about a certain state of affairs. Major causal relations are Agent, Instrument, and Cause, to which Reason, Force, Means, Causee, and Intermediary can be added.

5.1 Agent

5.1.1 Prototypical Agent

Typical features of Agent are intentionality and control. Intentionality implies animacy; the same implication, however, is not so clear in the case of control. In fact there are inanimate entities that not only cannot normally be controlled by agents (e.g., natural forces) but that are frequently conceived of as exerting control on human beings, notably emotions. So on a prototypicality scale, human beings rank the highest, followed by natural forces and emotions, while other inanimate entities rank the lowest and cannot, under normal circumstances, be assigned the semantic role Agent (see Table 2).

Table 2. Agency scale

	Control	Intentionality
Human beings	+	+
Natural forces, emotions	+	–
Other inanimate entities	–	–

In nominative-accusative languages, such as Latin, the role Agent is often assigned to the subject and expressed by the nominative. However, there are other types of clause structure, notably the passive, where the agent is an adverbial and consequently must be coded with specific morphology. A common metaphor for expressing Agent, and on which Latin relies, involves the use of Source/Origin expressions. In this perspective, states of affairs are conceived as moving entities (cf. Lakoff and Johnson 1980), and the agent is conceived as the point in space from which its trajectory starts. Other spatial metaphors involve different types of Location markers, variously intended to express a physical predominance of a trajector over a landmark, so that the metaphor that links space to agency is based on the feature of control (see Luraghi 2000, 2003b): this type of metaphor does not occur in Latin.

Prototypical agents of passive verbs in Latin are encoded by *ab* with the ablative, as in (45) and (66), and in (72)–(75):

(72) Sall. *Catil.* 31,5: *ipse lege Plautia interrogatus erat* ***ab L. Paulo***
'he had been questioned by Lucius Paulus under the Plautian law'

(73) Caes. *Gall.* 8,54,1: *fit deinde senatus consultum ut ad bellum Parthicum legio una* ***a Cn. Pompeio*** *altera* ***a. Caesare*** *mitteretur*
'then there was a decision made by the senate, that one legion should be sent into the Parthian war by Gn. Pompeius, another one by G. Caesar'

(74) Caes. *Gall.* 5,9,4: *repulsi* ***ab equitatu***
'pushed back by the cavalry'

(75) *Ioh.* 1,6: *fuit homo missus* ***a Deo*** *cui nomen erat Iohannes*
'there was a man sent by God whose name was John'

Note that the occurrence of passive verbs alone does not necessarily trigger an Agent interpretation for an *ab* phrase. Whenever the context also makes possible an interpretation as Origin, the latter is favored, both with animate and with inanimate nouns:

(76) Liv. 1,8,7: *patres certe* ***ab honore*** *patriciique progenies eorum appellati*
'they received the designation of "fathers" from their rank, and their descendants were called "patricians"'

(77) Liv. 1,17,10: *si dignum qui secundus **ab Romulo** numeretur crearitis*
'if you elect one who shall be counted worthy to follow Romulus'

(On the possibility that Agent is coded as Intermediary, i.e., through *per* with the accusative, see Section 5.2.3.)

Agent can also be coded through the plain dative (*dativus auctoris*):

(78) Catull. 8,5: *amata **nobis** quantum amabitur nulla*
'loved by us as never a girl will ever be loved'

(79) Plaut. *Rud*. 1298: *adeundus **mihi** illic est homo*
'this person must be approached by me'

(the last example is also cited by Hofmann & Szantyr [1965: 97]; see further *uobis* in (111) below). The dative is mostly limited to nominal forms of the verb, and in particular to forms that express obligation, even if some occurrences with finite verb forms are also attested:

(80) Cic. *inv*. 1,86: *quare illa **nobis** alio tempore atque ad aliud institutum, si facultas erit, explicabuntur*
'therefore this will be treated by us at another time and in another work, if there will be an opportunity'

The *dativus auctoris* is also attested in other Indo-European languages, in part with similar restrictions; see Hettrich (1990). Usually, the dative of Agent is explained through the Beneficiary meaning of this case: according to Hettrich, the dative can be reconstructed as the original case of the Agent in constructions that contain what he calls a *participium necessitatis*, not because this case conveys any special agentive meaning, but because it "gibt wie vielfach sonst, ... die 'Gerichtetheit' des Sachverhalts auf eine Person hin wieder. ... Der Dativ steht also in seiner Grundfunktion, ... kann man auch hier von einem dativus commodi sprechen" (1990: 73).[24] The relation between other occurrences of the dative denoting Beneficiary and the *dativus auctoris* is discussed by Hettrich (1990: 76) and Kühner & Stegmann (1912–1914 [1955]: 325). Hettrich quotes (81) in particular:

24. "[The dative] expresses, as in many other occurrences, the 'orientation' of a state of affairs toward a person. So the dative has its basic function, and one can speak even here of a *dativus commodi* [i.e., Beneficiary dative]."

(81) Plaut. *Bacch.* 515: *nam* ***mihi*** *decretumst renumerare iam omne aurum patri*
'for it is established for me that I will pay back all the gold at once to my father'

with an impersonal construction (*decretum est*), which can also be taken as passive, since the sense is 'I have established'. Impersonal constructions are especially frequent in Early Latin, as argued by Bennett (1914: 166), but extension to finite verb forms is also attested (ibid. 170). Extension to finite verb forms was favored in Latin because the *dativus auctoris* became closely connected with personal pronouns in Agent expressions.

Suárez Martínez (2001) connects the dative of Agent with the *dativus iudicantis*, a type of Experiencer (see Section 8 below).

5.1.2 Force

Force is the semantic role assigned to nonprotytpical agents. The status of Force is not the same across languages, because this semantic role is not always grammaticalized. As I have shown in Luraghi (1986), the Indo-European languages differ as to the extent to which an independent semantic role Force can be singled out; often, nonprototypical agents are simply treated as Agent. Latin belongs to the group in which Force and Agent are coded differently; note that the Indo-European languages in this group consistently code Force as Instrument (see Luraghi 1986, 1995). It is remarkable that the instrumental case has the function of expressing both Instrument and Cause in the Indo-European languages. This holds for languages such as Sanskrit, and it also holds for Latin, in which the ancient instrumental has fallen together with the ablative, a case which also had the function of expressing Cause in Proto-Indo-European (see Luraghi forthcoming a).

Indeed, Force bears a close resemblance to Agent, Instrument, and Cause, because Force shares some features with all these roles: it denotes control over states of affairs, similar to Agent, but it is inanimate, in the same way as Instrument. Cause can be inanimate, like Force and Instrument; like Force, it does not imply the co-occurrence of a controlling agent, and, most important, it is not manipulated. Force only occurs in states of affairs in which there is no Agent, and it controls the states of affairs. Cause can co-occur with

Agent (in which case it is sometimes labeled Reason, see Section 5.3), or it can occur where no Agent is implied.

As we will see in the discussion of the examples, it is sometimes unclear whether a certain NP in the ablative with a passive verb should be regarded as Force or Cause: this uncertainty depends on the very close association of the two concepts. It can be argued that Cause corresponds to Force in states of affairs denoted by intransitive verbs, as show by comparison of (82) with (83):

(82) *The old church collapsed because of an earthquake.*

(83) *The old church was destroyed by an earthquake.*[25]

Furthermore, the plain ablative can also code Means, a semantic role close to Instrument that implies the existence of an Agent but points toward a lower degree of manipulation. This semantic role is somewhere between Instrument and Cause, as we will see in Section 5.2.2, but can under certain circumstances also be close to Force, when it occurs with a passive verb (the difference between Means and Force is discussed ibid.).

Nonprototypical agents can also be treated as prototypical agents and thus be coded with a Source expression. Besides, nouns denoting natural forces or emotions can always be understood as expressing Cause, when they occur in the plain ablative, even with passive verbs. Some examples of Force, both coded as Instrument and coded as Source, are given in (84)–(86):

(84) Sall. *Catil.* 53,5: ***luxu*** *atque* ***desidia*** *ciuitas disrupta est*
'the city was ruined by luxury and laziness'

(Note that *luxu atque desidia* could also have the semantic role Cause, discussed in Section 5.3.)

(85) Cic. *off.* 1,68: *uinci* ***a uoluptate***
'to be overwhelmed by pleasure'

25. See Luraghi (1995) for further discussion.

(86) Caes. *Gall.* 3,13,9: *[naues]* ***ab aestu*** *reiectae nihil saxa et cautes timerent*
'the ships, when thrown back by the tide, feared nothing from rocks and shelves'

Reference handbooks point out that nouns denoting military forces can co-occur with passive verbs and be coded as Force – that is, with the plain ablative, rather than Agent. It should be mentioned that the frequency of the so-called *ablativus militaris* (Kühner & Stegmann 1912–1914 [1955]: 407–408) appears to be overstated at closer scrutiny. Let us first examine some examples.

(87) Liv. 4,55,8: *illa pro certo habenda, in quibus non dissentiunt, ab arce Caruentana, cum diu nequiquam oppugnata esset, recessum,* ***Verruginem in Volscis eodem exercitu receptam****, populationesque et praedas et in Aequis et in Volsco agro ingentes factas*
'there is no dispute, however, that the Romans withdrew from the citadel of Carventum after a long and futile siege, and that Verrugo was recaptured by means of the same army after committing great devastation and securing many spoils in both the Volscian and Aequian territories'

(88) Cic. *Flacc.* 26,63: *quae tam procul a Graecorum omnium regionibus,* ***disciplinis linguaque diuisa cum in ultimis terris cincta Gallorum gentibus barbariae fluctibus adluatur****, sic optimatium consilio gubernatur ut omnes eius instituta laudare facilius possint quam aemulari*
'(a city) which, though so far separated from the districts of all the Greeks, and from their fashions and language, and though placed in the extremity of the world and surrounded by tribes of Gauls, and washed with the waves of barbarism, is so well regulated and governed by the counsels of its chief men, that there is no nation which does not find it easier to praise its institutions than to imitate them'

Example (87) contains a plain ablative with a passive verb, but since the whole passage contains impersonal forms, one can hold this passive to be

impersonal too and *exercitu* to be an Instrument (or Intermediary, see Section 5.2.3 below) expression.[26] A frequently mentioned example is (88), which is always quoted out of context: if one considers the context, *Gallorum gentibus* does not look much like an Agent phrase, because the state of affairs denoted by *cincta* is not dynamic.

In (89), an abstract noun is taken to refer to a group of people and occurs in an Agent phrase with *ab*:

(89) Liv. 2,18,2: *eo anno Romae, cum per ludos* ***ab Sabinorum iuuentute*** *per lasciuiam scorta raperentur*
'during this year in Rome, because during the games some whores were carried off by Sabine youths in sheer wantonness'

The occurrence of *ab* with inanimate nouns is especially frequent in the New Testament. High frequency is a result of Jerome's translation practice, which consisted of trying to keep the same Latin preposition as equivalent to each specific Greek complex of preposition plus case. In the case of Agent expressions, Greek has ὑπό with the genitive for both prototypical and non-prototypical Agents; consequently, Jerome almost always chooses to translate with *ab* (exceptions are very few). This overextension of *ab* is made possible by the fact that the PP could indeed occur in place of the plain ablative, the only difference being that in a native Latin text it would be less frequently employed. (Note that the same inanimate landmarks that occur with the passive in *ab* phrases in the Vulgate could occasionally be coded as Agent, rather than Force, in Classical Latin; the difference between the Classical authors and Jerome lies only in frequency.)

26. Hofmann & Szantyr (1965: 122) state that the use of the plain ablative for animate agents is particularly frequent in Livy and Tacitus; however, from a search of *exercitu* and *militibus* in these authors, (87) seems to be about the only possible Agent phrase.

5.2 Instrument

5.2.1 Prototypical Instrument

Instruments are prototypically inanimate and manipulated. Natural forces and emotions are to a great extent nonmanipulated, and in normal situations they cannot take the role Instrument (see the discussion of (100) below). Humans, who are usually presented as initiators of some state of affairs, can under some circumstances also be acted on by another agent in order to bring about a certain state of affairs. This situation can imply different relations between the (primary) agent and the other human, who, in spite of being manipulated, also has an active role in the accomplishment of an action: as we will see in Section 5.2.3, there appears to be what may be called “split agency”, whereby intentionality and control are ascribed to either human participant to different extents.

As for the expression of Agent, as well as for Instrument and related roles (e.g., Intermediary), cross-linguistic comparison shows that, although numerous spatial metaphors are available, there are a number of recurrent patterns. A widely attested metaphor for conceptualizing Instrument is the one described by Lakoff and Johnson (1980: 135), according to which “an instrument is a companion”: accordingly, in many languages, such as the Germanic and Romance languages, Instrument and Comitative are coded in the same way. This metaphor does not occur in Latin, where Instrument is coded through a special case, while Comitative is coded through a PP. In fact this metaphor is not as widely spread across languages as Lakoff and Johnson appear to think (see Stolz 1996).

In Latin, Instrument is normally encoded through the plain ablative:

(90) Cic. *Catil.* 1,9: *quos* ***ferro*** *trucidari oportebat, eos nondum* ***uoce*** *uolnero*
‘I do not yet attack, even by words, those who ought to be put to death by the sword’

(91) Caes. *Gall.* 3,8,1: *naues habent Veneti plurimas,* ***quibus*** *in Britanniam nauigare consuerunt*
‘the Veneti have a very great number of ships, with which they have been accustomed to sail to Britain’

(92) Plaut. *Men.* 1001: *quid ego* ***oculis*** *adspicio* ***meis****?*
‘what do I behold with my eyes?’

(Other examples are *ueneno* in (104) and *pecunia* in (108).)

Especially with abstract nouns, *per* with the accusative is often found, rather than a plain ablative. This usage may result from an extension of Intermediary, based on a metaphor described in Luraghi (2001b), according to which “an instrument is an intermediary”; or it may derive directly from the perlative meaning of *per* through the “channel metaphor”, according to which “an instrument serves as a path for the agent to perform an action”.[27] Indeed, *per* usually points toward a lesser degree of manipulation and can best be regarded as coding another semantic role, Means, which profiles the enabling force of an entity rather than its manipulation, as Instrument does (see Section 5.2.2 below). Only in Vulgar Latin is *per* employed with concrete nouns in real Instrument expressions, especially with means of transportation:

(93) *Itala*, cod. d., *Ioh.* 21,8: *discipuli* ***per nauiculam*** *uenerunt*
‘the disciples came in a small boat’[28]

Since in Greek διά with the genitive could be used extensively for Instrument, and because Jerome always used *per* as the Latin equivalent of the Greek PP, the use of *per* for Instrument is particularly frequent in the Vulgate (on this matter, see further de la Villa 2001b).

Typical of Christian Latin is the instrumental use of *in* plus ablative. This usage was partly due to the interference of Greek ἐν. The occurrence of the latter preposition in Instrument expressions, in its turn, has been explained as due to Semitic influence.[29] An example is (94):

27. In Latin there is no clue as to whether animate nouns occur in Instrument/Intermediary expressions before inanimate ones, so it is hard to show how the meaning of *per* has evolved.
28. See Beckmann (1963: 25–35). The Vulgate has a plain ablative (*nauigio*) instead of *per nauiculam*, and the Greek text has a plain dative.
29. See Moulton (1911) for the use of ἐν in New Testament Greek; Rubio (this work, vol. 1). However, it must be remarked that Latin instrumental *in* also translated Greek ἐπί. So the extent to which Latin *in* acquired instrumental value in Christian Latin is greater than the extent to which Greek ἐν also displayed such value. See Luraghi and Cuzzolin (2007).

(94) Luc. 22,49: *si percutimus* ***in gladio****?*
'should we fight with the swords?'

Comitative expressions start to be used for Instrument only at a late stage. Some early occurrences of instrumental *cum* are quoted in reference works; very often, they can be taken as denoting Attendant Circumstances rather than Instrument. An interesting example, discussed in Pinkster (1990: 203–204), involves parallelism between *cum* and *sine*:

(95) Cato *agr.* 77–78: *in solo tracta* ***cum melle*** *oblinito bene ... in balteo tractis caseo ad eundem modum facito ...* ***sine melle***
'cover the *tracta* on the crust thickly with honey ... follow the same directions with respect to the crust, *tracta*, and cheese but ... without honey'

Parallelism with *sine* points in the direction of a relation of Accompaniment, rather than Instrument: what is profiled is the presence versus absence of a certain ingredient.

More examples come from late technical texts, as the *Mulomedicina Chironis*:[30]

(96) Veg. *mulom.* 201,26: ***cum traumatico*** *curabis*
'you will heal it with a bruise ointment'

Sporadically, and especially in late texts, the prepositions *ab* and *ex* also occur in Instrument expressions:[31]

(97) Apic. 11: *eodem momento, quo friguntur et levantur,* ***ab aceto calido*** *perfunduntur*
'at the same moment when they fry, they are taken out of the pan and covered with hot vinegar'

30. See Beckmann (1963: 35–47) and Grevander (1926).
31. Some occurrences in which *ab* has an instrumental meaning already occur in Classical Latin; see Beckmann (1963: 47–54).

5.2.2 Means

Croft (1991: 178–179) defines another semantic role, Means, which he only exemplifies with *by*-clauses, rather than with PPs. Radden (1989: 442–443) also defines Means as relevant for English; in his definition, PPs that bear the role Means are crucially identified by the occurrence of *through* or *by means of.* In comparison to Instrument, Means denotes a somewhat less manipulated and controlled entity but apparently implies the existence of an agent, as indicated by Croft (1991: 178), who holds that "the means clause must begin with a VOL[itional] arc – that is, it must be a volitional action." In Luraghi (2003a) I argued against the relevance of a semantic role Means for Ancient Greek. In Ancient Greek, manipulation is the distinctive feature of Instrument; lack of manipulation is typical of Cause. The difference between manipulated and nonmanipulated entities is made clear by the distribution of cases with the preposition διά: manipulated entities are denoted by NPs in the genitive, while nonmanipulated ones are denoted by NPs in the accusative. PPs with διά and the accusative come especially close to what is defined as Means by Croft and Radden, but case variation does not allow for an area of overlap where one finds "less manipulated" entities. In Latin, on the contrary, some occurrences of *per* are ambiguous as to the feature of manipulation and cannot be clearly classified as either Instrument or Cause. Consider the following examples:

(98) Cic. *Caecin.* 3: *qui* ***per tutelam aut societatem aut rem mandatam aut fiduciae rationem*** *fraudauit quempiam, in eo quo delictum maius est, eo poena est tardior?*
'if a man, as a guardian, or as a partner, or as a person in a place of trust, or as any one's agent, has cheated any one, the greater his offence is, the slower is his punishment?'

(99) Cic. *Mil.* 16,43: *qui ita iudicia poenamque contempserat ut eum nihil delectaret quod aut* ***per naturam*** *fas esset aut* ***per leges*** *liceret?*
'who had shown such contempt for courts of justice and punishment that he took no pleasure in anything which was not either impious, from its disregard of the prohibitions of nature, or illegal, from its violation of law?'

In (98) and (99) we find different degrees of manipulation. In (98), the *per* phrase refers to a power which is intentionally and actively used by an agent in order to bring about a state of affairs. But manipulation is not what is profiled by the use of *per*: the preposition rather profiles the fact that the agent's intentions are achieved by the enabling effects of certain powers. In (99), *per naturam* and *per leges* do not denote manipulated entities, as shown by the predicates *fas esset aut . . . liceret*, but rather entities that help the agent to achieve a certain result, and come close to Cause (see further Section 5.3). This is what I have defined as "enabling Cause" in Luraghi (2003a); its range covers features of both Instrument and Agent. In such a context the ablative is also possible, as shown by comparison of (99) with (20).

Besides manipulation, the feature of control must also be understood differently with Means expressions. While the occurrence of an instrument implies the co-occurrence of an agent, which controls the state of affairs, with means it is only implied that a human benefits from the state of affairs, even without directly controlling it. This situation can be described in terms of features if we separate intentionality from control and understand intentionality as conformity to the aims of a human entity more or less actively implicated in the state of affairs. Such lesser controlled and hardly manipulated entities are understood as belonging to the same category in Latin, namely, Means. As we will see in the next paragraph, the possible lesser relevance of manipulation has consequences for the definition of Intermediary as well.

Because the feature of manipulation is not relevant for Means, *per* often occurs with nouns denoting nonprototypical Instrument – that is, abstract nouns. Concrete nouns are sporadic (see Pinkster 1990: 205–206); they occur more frequently in technical texts. Means is usually coded through *per* with the accusative, but it can also be coded through the plain ablative. Abstract nouns also occur frequently in the plain (instrumental) ablative, and expressions such as *ui* 'by force' are as frequent as *per uim*; possible alternation between the plain ablative, *metu*, and *per* with the accusative is demonstrated in (100):

(100) Cic. *Verr.* II 61,150: *sin autem* ***metu*** *coacti dederunt, confiteare necesse est te in prouincia pecunias statuarum nomine* ***per uim ac metum*** *coegisse*
'but if they presented the statues under the compulsion of fear, you

must confess that you exacted money in the province on account of statues by violence and fear'

Emotions are not commonly conceived as entities that can be controlled by human beings, so the occurrence of a noun denoting an emotion in an instrument expression is most unexpected. Indeed, the first occurrence of the same word in the ablative in this passage is understood as Force, or possibly Cause, but certainly not as Instrument. Passive voice (and in this case the occurrence of the passive participle *coacti*) does not by itself trigger a reading of the plain ablative or of any other type of expression as denoting Force, as shown by the occurrence of *ui* in (101) and *per uim* in (102), where the context makes clear that there is another entity that controls the state of affairs:

(101) Cic. *Tull.* 23,53: *non modo seruos M. Tulli occidere iure non potuisti uerum etiam, si tectum hoc insciente aut per uim demolitus esses quod hic in tuo aedificasset et suum esse defenderet, id* ***ui*** *aut clam factum iudicaretur*
'you not only could not lawfully slay the slaves of Marcus Tullius, but even if you had demolished the house without his knowledge, or by violence, because he had built it in your land and defended his act on the ground of its being his, it would be decided to have been done by violence, or secretly'

(102) Cic. *Sull.* 66: *atque in ipsa rogatione ne* ***per uim*** *quid ageretur, quis tum nostrum Sullam aut Caecilium uerebatur?*
'and even in regard to this very motion, who was there of us who had any fears of Sulla or Caecilius attempting to carry any point by violence?'

The occurrence of *per* usually prevents a Force interpretation: contrary to Force, Means occurs in events where an intentional Agent also occurs, and it points toward the fact that control is exerted by another entity (i.e., the agent, not the means). In terms of manipulation and control, causal semantic roles taken by inanimate entities display the distribution of features shown in Table 3.

Some occurrences of *per* with abstract nouns leave room for a Manner interpretation, as in *per iocum* 'in fun'; see Section 10 below. Occurrences of

Table 3. Instrumentality scale

Semantic role	Manipulated	External control	Intentionality
Instrument	+	+	+
Means	–	(+)	+
Force	–	–	–
Cause	–	± (nonrelevant)	± (nonrelevant)

certain concrete referents may be seen as inanimate Intermediary, as in *per litteras*; see Section 5.2.3.

5.2.3 Intermediary

With animate nouns, *per* denotes Intermediary. The latter is the semantic role taken by the (mostly animate) entity which performs an action on behalf of a primary agent, who is presented as exerting intentionality, and in some cases partial control, over the state of affairs. Some examples of Intermediary expressions are (103)–(106):

(103) Plaut. *Mil.* 952: *condicio . . . fertur* ***per me*** *interpretem*
'conditions are established through my mediation'

(104) Cic. *Cluent.* 22.61: *nempe quod Habitum* ***per seruum*** *medici ueneno necare uoluisset*
'because he attempted to murder Habitus by poison, through the slave of the doctor'

(105) Sall. *Catil.* 44,1: *sed Allobroges ex praecepto Ciceronis* ***per Gabinium*** *ceteros conueniunt*
'the Allobroges, as Cicero recomended, introduced themselves to the other conspirators through Gabinius'

(106) Matth. 1,22: *hoc autem totum factum est ut adimpleretur id quod dictum est a Domino* ***per prophetam*** *dicentem*
'now all this has happened, that it might be fulfilled which was spoken by the Lord through the prophet'

The above examples demonstrate different degrees of active involvement on the part of the Intermediary. In (103) the act of establishing conditions

is certainly done in the interest of some other agent, but the intermediary is the final performer of the actions involved. In (104) the action that the agent wants to bring about is to be performed by the intermediary, who has the ultimate responsibility for actually performing it: in other words, intentionality and control are divided between the agent and the intermediary. This is a case of what I have defined as "split agency" (see Luraghi 1989). Similar to Means, Intermediary implies that intentionality is assigned to another entity, in this case better described as the primary agent, on whose behalf the intermediary acts. So the intermediary, who can be manipulated to different extents, exerts control over the action, but the primary agent is responsible for intentionality.

In occurrences such as (104), Intermediary comes close to Causee, the semantic role of the second argument of causative constructions. Possibly Intermediary and Causee are at least in part the same semantic role in two different syntactic constructions: while Causee is an argument, Intermediary is an Adverbial. Causee may be coded like Patient, as in (107):

(107) *He caused the slave to poison Habitus*

thus profiling only lack of intentionality; Intermediary, on the other hand, profiles both lack of intentionality and ultimate control.

Contrary to the examples discussed above, in (105) the intermediary Gabinius does not perform the action denoted by the verb *conuenire*, and the degree of manipulation is low. In this case, the intermediary is the human entity thanks to which the state of affairs is brought about: it is similar to an enabling Cause, in the terminology of Luraghi (2003a), and to certain Means expressions, as seen in Section 5.2.2; see also the discussion of (108)–(110). Finally, example (106) shows that an Intermediary expression can cooccur with an Agent expression *a Domino*.

Occasionally, *per* with the accusative may occur with passive verbs and come close to Agent. However, choice of a *per* rather than *ab* phrase always implies that the state of affairs is brought about in the interest of another participant:

(108) Cic. *epist*. 1,1,1: *Hammonius, regis legatus, aperte pecunia nos oppugnat; res agitur* ***per eosdem creditores, per quos****, cum tu aderas, agebatur*

'the king's agent, Hammonius, is openly attacking us by bribery. The business is being carried out by means of the same moneylenders as it was when you were in town'

(109) Cic. *epist.* 1,4,2: *dignitatis autem tuae nemo est quin existimet habitam esse rationem* ***ab senatu****; nemo est enim, qui nesciat, quo minus discessio fieret,* ***per aduersarios tuos esse factum***
'but as to your own claims, everyone considers that all proper regard has been paid them by the senate, for there is no one that is ignorant of the fact that it was all the doing of your opponents that no division took place'

(110) Cic. *epist.* 1,5b,2: *nunc id speramus idque molimur, ut rex, cum intellegat sese, quod cogitabat, ut* ***a Pompeio*** *reducatur, adsequi non posse et, nisi* ***per te sit restitutus****, desertum se atque abiectum fore, proficiscatur ad te*
'my hope and my earnest endeavor now is that the king should pay you a visit, when he understands that he cannot obtain what he had in his mind, namely, restoration by Pompey, and that, unless he is restored with your help, he will be abandoned and neglected'

It can be remarked that the *per* phrases always occur in passages where some other agent is implied who exerts intentionality. In (108) in particular *per creditores* is used as instrument by *Hammonius*, with some degree of manipulation. But note that manipulation is not necessary: in (109), *per aduersarios* may refer to persons instigated by the senate, but in (110), *per te* simply refers to somebody who may possibly help another person to reach his aims.

Note that in this last example, where we can translate *per te* as 'by your help', the human who exerts intentionality is presented as unable to act. In a sense, *per te* in this example is a real Agent phrase, because the referent has both intentionality and control, but the context makes clear that there is some other human entity that would profit from his action. This occurrence is the equivalent of the use of inanimate NPs with the semantic role Means seen in Section 5.2.2; the meaning of *per* in this example is 'thanks to'.[32]

32. Sometimes *propter*, too, occurs in similar expressions, where it can be translated as 'thanks to': its occurrence points toward the close connection of this type of 'enabling' Intermediary with Cause. See Hofmann & Szantyr (1965: 247) for the examples.

Use of *per* with personal pronouns is frequent; the PP *per se*, with the reflexive, comes to mean 'by oneself':

(111) Cic. *Phil*. 12,2,4: *ualde hercules uobis laborandum est, patres conscripti, ut uestram dignitatem amittatis, quae maxima est; Antoni, quae neque est ulla neque esse potest, retineatis, ut eam* ***per uos*** *reciperet quam* ***per se*** *perdidit*
'you then, O conscript fathers, are to make great exertions for the express purpose of losing your own dignity, which is very great, and of preserving that of Antonius, which neither has nor can have any existence; and of enabling him to recover it by your conduct, which he has lost by himself'

The origin of the frequent expression *per deos immortalis* can be seen in (112):

(112) Cic. *Manil*. 59: *sed in hoc ipso ab eo uehementissime dissentio, quod quo minus certa est hominum ac minus diuturna uita, hoc magis res publica, dum* ***per deos immortalis*** *licet, frui debet summi uiri uita atque uirtute*
'but, in this case, I differ from him most strongly; because, the less certain and the less lasting the life of man is, the more the republic ought to avail itself of the life and valor of any admirable man, as long as the immortal gods allow it to do so'

Intermediary is a semantic role which is typically assigned to humans; metaphorically an intermediary can be an inanimate concrete entity, in the frequent case of *per epistulam*, *per litteras*: in such cases, the instrument used to transfer information is metaphorically conceived as acting as intermediary in communication.

5.3 Cause

In comparison to roles such as Agent and Instrument, Cause is more complex, because there appears to exist no natural class of causes: causes can be natural forces or emotions, abstract notions, other types of inanimate entity,

human beings, or states of affairs. Languages display a much larger variety of expressions for Cause than for Agent and Instrument, as exemplified by English (see Dirven 1993, 1995; Radden 1985): while the features of animacy and manipulation help to identify prototypical classes of agents and instruments, there is hardly a class of "natural causes".

As I have repeatedly remarked in the preceding paragraphs, Cause does not imply the existence of an agent who acts voluntarily, as Instrument and, to a lesser extent, Means do. However, this does not mean that Cause implies that there is no other entity which controls the state of affairs, as Force does; in other words, an agent can also co-occur. Compare the following examples:

(113) *Mary was shivering from the cold.*

(114) *Paul decided to leave for fear of being late.*

In (113) the cause brings about a certain state of affairs, and the human entity involved undergoes it unintentionally (the semantic role of *Mary* in this case is Experiencer). In (114) the referent of the Cause expression does not directly bring about the state of affairs, but it prompts the agent to bring it about. This second type of Cause is more properly called Reason. Although from a cognitive point of view Cause "proper" and Reason are significantly different, at least in the Indo-European languages they are not formally distinct: apparently the normal situation is one where there is only one grammaticalized semantic role, for which I use the name Cause without making any further subdivision. As we will see in Section 6, Reason is important because it constitutes an area of overlap of Cause with Purpose.

Cause may be coded like Instrument: in Latin we find the plain ablative for both. These two semantic roles are partly in complementary distribution, since Instrument can only occur with controlled states of affairs, while Cause can occur with uncontrolled states of affairs (but this does not mean that it cannot occur with controlled ones). As I have argued in Section 5.2.2 in the discussion of the semantic role Means, manipulation seems crucial to the definition of Instrument. Cause shares the feature of nonmanipulation with Means and Force. Examples of the plain ablative in Cause expressions are (115)–(117):

(115) Cic. *Cato* 28: *orator metuo ne languescat* ***senectute***
'I fear that the speaker becomes weaker because of old age'

(116) Verg. *Aen.* 4,696–697: *nam quia nec* ***fato, merita*** *nec* ***morte*** *peribat, sed misera ante diem*
'for since the end came not by fate, nor by a death she had earned, but wretchedly before her day'

(117) Tac. *Germ.* 5,1: *terra etsi aliquanto specie differt, in uniuersum tamen aut* ***siluis*** *horrida aut* ***paludibus*** *foeda*
'there are some varieties in the appearance of the country, but broadly it is a land of wild forests and unhealthy marshes'

Examples (118) and (119) demonstrate the close relation between Cause and Means and Cause and Force: in (118) the ablatives *labore iustitia* can be understood as Cause, since they refer to nonmanipulated entities, and there is no human entity exerting intentionality: but it can also be argued that the state of affairs is brought about in the interest of an entity which is understood as a plurality of human beings. In (119), the passive voice favors a Force interpretation, but Cause is not ruled out:

(118) Sall. *Catil.* 10,1: *sed ubi* ***labore atque iustitia*** *res publica creuit, …*
'but when our country grew great through toil and the practice of justice'

(119) Sall. *Catil.* 5: *agitabatur magis magisque in dies animus ferox* ***inopia rei familiaris et conscientia scelerum***
'day by day his violent spirit was goaded more and more by the absence of his patrimony, and by his consciousness of guilt'

Most often, Latin employs two prepositions, *ob* and *propter*, which originally expressed proximity, following the Location metaphor (see Luraghi, 2005b): a location at which a state of affairs takes place is conceived of as its cause. The preposition *pro*, which codes Purpose or Beneficiary, can also code Cause.

The spatial meaning of *ob* was 'in front of', similar to *pro*. As I show in Section 7, location in front of a landmark could metaphorically be understood as replacement of the landmark by the trajector. This is clearest in the case of *pro*, but close scrutiny of the occurrences of *ob* in Cause expressions shows that, at least in Plautus, this preposition occurred when a cause could be understood as being involved in an exchange; it often occurs with *dare* or verbs with similar meaning. Consider (120)–(121):

(120) Plaut. *Truc*. 589–590: *dic* ***ob haec dona****, quae ad me miserit, / me illum amare plurumum omnium hominum ergo*
'tell him, that, in return for these presents which he has sent me, therefore I love him the most of all men'

(121) Plaut. *Asin*. 906: *pueri, plaudite et mi* ***ob iactum*** *cantharo mulsum date*
'boys, clap your hands, and give me some honeyed wine in my cup, in honor of my throw'

In (120), the entity denoted by *haec dona* is a cause for the state of affairs denoted by *me illum amare*, but the state of affairs, being a result, is also viewed as a matter of exchange: in other words, the resulting state of affairs is viewed as a return for the entity that brought it about. Similar remarks can be made about (121), where the verb *dare* occurs. Furthermore, *ob* frequently occurs with the word *rem* (more than half of the occurrences in Cause expressions in Plautus) and does not usually occur with animate nouns.

The preposition *propter* has a different distribution: it occurs with a wider variety of verbs, and frequently with nouns that denote humans (often with personal pronouns). Examples are (122)–(123):

(122) Plaut. *Merc*. 959: *nam mea uxor* ***propter illam*** *tota in fermento iacet*
'for my wife is lying all in a tizzy because of that girl'

(123) Plaut. *Capt*. 701–702: *sed hoc mihi aegre est, me huic dedisse operam malam, qui nunc* ***propter me meaque uerba*** *uinctus est*
'but this thing grieves me, that I've done this person a bad turn, who is now in chains on account of me and my talking'

As I have argued in Luraghi (2005b), *ob* had become marginal in Cause expressions by the age of Caesar and Cicero, being mostly limited to expressions such as *ob eam rem/causam*, while *propter* was the most frequent way of coding Cause. Later authors, starting with Livy, revived the use of *ob*, using it in contexts in which it did not occur earlier and possibly never occurred in the spoken language, as in (124):

(124) Liv. 5,4,11: *decem quondam annos urbs oppugnata est* ***ob unam mulierem*** *ab uniuersa Graecia, quam procul ab domo?*
'a city was once besieged by the whole of Greece for ten years, for the sake of one woman, and at what distance from home?'

In Late Latin *ob* is virtually nonexistent: it does not occur in *Aegeria*, and Jerome uses it infrequently when he has no clear translation equivalent, such as to translate causal ἀπό or the plain dative, while he only uses *propter* to translate διά with the accusative.

As noted above, Cause can also be coded through *pro* with the ablative. This preposition basically indicates an exchange, as shown in (125):

(125) Plaut. *Epid.* 363–365: *eum [ego] docebo, / siqui[d] ad eum adueniam, ut sibi esse datum argentum dicat /* ***pro fidicina*** *argenti minas se habere quinquaginta*
'I'll instruct him, if any one comes to him, to say that the money has been paid to him; that he gets fifty *minae* of silver as payment for the music-girl'

It can occur in Cause expressions in contexts similar to those in which *ob* also occurs:

(126) Liv. 5,36,8: *uicere seniores, ut legati prius mitterentur questum iniurias postulatumque ut* ***pro iure gentium uiolato*** *Fabii dederentur*
'the older men thought that ambassadors should first be sent to Rome to make a formal complaint and demand the surrender of the Fabii as satisfaction for their violation of the law of nations'

Contextual factors trigger different interpretations of *pro* phrases as possibly expressing Cause, Purpose, or Beneficiary, as shown in de la Villa (1995). It must be noted that occasional overlap of Cause and Purpose is also attested with other prepositions. Only later, as remarked by Löfstedt (1911: 219), does overlap increase and in *Itinerarium Egeriae* it seems complete (see Luraghi 2005b and Section 5.5 below).

Especially with nouns denoting emotions, and in negative sentences (*causa impedientis*), Cause can also be coded through *prae* with the ablative:

(127) Cic. *Att*. 11,7,6: *non possum* ***prae fletu et dolore*** *diutius in hoc loco commorari*
'I cannot dwell on this topic any longer because of tears and grief'

Already in Plautus, *de* can also occasionally denote Cause. In this case, Cause is coded as Source or Origin. The metaphorical linking of spatial source with the concept of cause frequently operates across languages, as many authors have pointed out. Nikiforidou (1991) argues that such an extension is based on the metaphor "causes are origins". Croft's model of causal structure of events, discussed in Section 5.4 below, takes Cause to derive from Source via the mapping of the space domain onto the domain of causation (see Croft 1991). Hofmann & Szantyr (1965: 262) quote some examples, remarking that one can usually see how abstract meaning was created out of the local meaning 'from'. Causal usage of *de* is already attested in Early Latin and apparently increases in later stages of the language. Examples are (128)–(129):

(128) Ter. *Hec*. 757: ***de tali causa*** *nuptae mulieri se ostenderet*
'she presented herself before a married woman for such a reason'

(129) Ov. *am*. 3,5,6: *umida* ***de guttis*** *lene sonantis aquae*
'damp from the stream of softly sounding water'

as well as the frequent expression *qua de causa* 'for this reason'.

Causal *de* also occurs in the *Itinerarium Egeriae* (See Luraghi 2005b) as well as in late technical texts:

(130) Marcell. *med.* 1,62: *si* ***de sole*** *caput doleat*
'if one has headaches caused by the sun'

In this and the preceding sections I have argued that Cause has close connections with the semantic role Means. Accordingly, Cause can be coded as Means, through *per* with the accusative. Consider (131)–(132):

(131) Plaut. *Aul.* 247–248: *nam si opulentus it petitum pauperioris gratiam / pauper metuit congrediri,* ***per metum*** *male rem gerit*
'for if a wealthy person goes to ask a favor of a poorer one, the poor man is afraid to meet with him; through his apprehension he hurts his own interest'

(132) Tac. *Agr.* 37,4: *acceptum aliquod uulnus* ***per nimiam fiduciam*** *foret*
'serious loss would have been sustained through the excessive confidence of our troops'

In (131) the *per* phrase indicates the cause of the state of affairs: the cause is coded as Means because the preposition profiles a manner of acting by an intentional agent; note, however, that, contrary to the common circumstances in which Means expressions occur, the possible behavior of the agent would not be intentional and would not be to his benefit. In (132) we find a passive; the state of affairs does not conform to the intentionality of the implied agent, nor does the latter profit from it. On the other hand, Cause can come close to Means when coded through *propter*. Example (133) shows how *per* and *propter* could overlap:

(133) Sall. *Iug.* 26,1: *Italici, quorum uirtute moenia defensabantur, confisi deditione facta* ***propter magnitudinem*** *populi Romani inuiolatos sese fore*
'the Italians, by whose valor the city was defended, and who trusted that, in the event of a surrender, they would be able to escape without personal injury, out of respect for the greatness of Roman power'

The development of the causal meaning of *per* is illustrated in Hofmann & Szantyr (1965: 240–241).

5.4 Typological considerations

In the first place it is remarkable that Latin has a case which, in spite of being called "ablative", functions as an instrumental and has as its main function the expression of Instrument and, to a lesser extent, Cause (and Manner, see below). Indeed, an instrumental case is frequently found in case systems of genetically unrelated languages which have more than four cases (see Luraghi 1991).

As already noted, Latin belongs to the group of languages that keep prototypical and nonprototypical agents formally distinct, thus having a grammaticalized semantic role Force. Furthermore, Latin has a specific type of

expression for Intermediary, which also extends to nonprototypical Instruments (i.e., human ones). Intermediary expressions can, to some extent, extend to Agent. The extension of Intermediary to Agent, common in many Indo-European languages, is apparently restricted to this language family, according to the data in Palancar (2002). Limited to human referents, Agent can further be coded through the plain dative. Latin also has a further grammaticalized semantic role, halfway between Instrument and Cause, namely Means, that shares the feature of nonmanipulation with Cause and the feature of external control with Instrument.

The relation of Instrument to other semantic roles has been the topic of several typological studies. Stolz (1996) has introduced a classification, based on possible occurrence of a polysemous marker that encodes Comitative and Instrument, according to which languages are grouped as "coherent" (those in which Instrument = Comitative), "incoherent" (where Instrument $\neq$ Comitative), and "mixed". Latin belongs to the group labelled "incoherent", but it must be pointed out that Comitative is encoded by the same case as Instrument, plus a preposition. Languages of this type are frequent, both in Indo-European and in other language families (see Stolz 1996; Luraghi 2001b).

That the encoding of Cause relies on a wide variety of expressions is not surprising. When expressed through a plain case, Cause merges with Instrument in Latin. This type of polysemy occurs in other languages, both Indo-European and non-Indo-European (see Palancar 2002). Other common types of polysemy involve Cause and Source/Origin and Cause and Location. Of these, the former is not particularly frequent in Latin. On the other hand, Location, and specifically location in front of an entity, is extended to Cause with numerous prepositions: *prae*, *ob*, and *propter*.

Croft (1991: 194–196) put forward a model of event structure that can be defined as the "causal approach". Following this approach, space is mapped onto the abstract domain of causation, and semantic roles are divided into antecedent and subsequent, depending on their location relative to the transmission of force that brings about an event. In Luraghi (2001a), I suggested a somewhat modified version that also includes concomitant (i.e., neither subsequent nor antecedent) semantic roles. Antecedent roles correspond to Source on the spatial plane, concomitant roles to Location, and subsequent roles to Direction. In Figure 6, I give a somewhat simplified picture of spatial and corresponding nonspatial roles.

Source domain: space	Source	Location	Direction
	↓	↓	↓
Target domain: causation	Agent, Cause	Instrument	Purpose, Beneficiary

Figure 6. Mapping of space on the domain of causation

According to Figure 6, Cause should be coded mostly as Source; a further prediction is that Cause should not merge with Purpose. As we have seen in Section 5.3, Cause is often coded as Location in Latin, and, as partly anticipated, polysemy involving Cause and Purpose is frequent. Because this polysemy also occurs in many other Indo-European languages, and because it is even more frequent in the Romance languages, I discuss it in Section 6.1 below.

5.5 Diachronic considerations

Except for the dative of agency, which had a limited distribution, Latin did not inherit a specific way of encoding the agent of passive verbs from Proto-Indo-European. As remarked by several scholars (see, e.g., Strunk 1991, Hettrich 1990, Luraghi 1986), Proto-Indo-European did not have a grammaticalized expression for this purpose (most likely because it lacked a fully developed passive voice, see Luraghi 1986). The extension of *ab* from Source to Agent must have taken place in Latin, rather than in the protolanguage; in Latin the use of *ab* appears to be well established already in early texts, to such an extent that Bennett (1914: 297) states that "it is superfluous to give examples". The encoding of Agent remains very much the same throughout the history of Latin. Only very late does one find evidence for the replacement of *ab* by *de*, which leads to the situation attested in the early Romance languages, where Agent was encoded by prepositions derived from *de*. It must be remarked in any case that *de* did not directly substitute for agentive *ab*: rather, it started extending to concrete spatial usages of *ab* as early as Plautus. Replacement of agentive *ab* by *de* must be seen as the result of an ongoing process, by which *de* replaced *ab* in all its meanings.

To a limited extent, passive agent was expressed as Intermediary in the early Romance languages. This way of encoding Agent was especially rel-

evant in Gallo-Romance, while in the other Romance languages coding of Agent as Source and coding as Intermediary competed for some time. In Medieval Spanish and Medieval Italian, both *de* and *por* and *da* and *per* occur in Agent expressions. The modern languages followed divergent paths: while *por* has been virtually generalized in Spanish, *da* is the standard way to encode passive agent in Italian. Note that Gallo-Romance is the only dialect group that retained the distinction between *per* (Fr. *par*) and *pro* (Fr. *pour*); in Ibero-Romance the distinction *por/para* is a late innovation. In Medieval Italian *per* could also express Agent, in the same way as *da*; later on the use of *per* became more and more restricted until it disappeared, and the expression of passive Agent remained limited to *da*.

I have shown that Latin has different codings for prototypical and nonprototypical Agent; the semantic role Force was grammaticalized, and it was coded as Instrument. In the Romance languages there is no specific coding for Force: nonprototypical agents are treated as Agent and are coded through the same prepositions.

The instrumental ablative is a direct outcome of the Indo-European instrumental case, to which it partly also goes back morphologically. The encoding of Instrument remains the same throughout the history of Latin; the only notable alternative construction, limited to Christian Latin, is *in* with the ablative, derived from Greek ἐν plus dative, and *per*, limited to the Vulgate, which Jerome used for translating Greek διά plus genitive. The instrumental use of *cum*, which attests to the extension of Comitative to Instrument reflected in the Romance languages, only started late.

The ablative of Cause in Latin is synchronically the same as the ablative of Instrument, but its origin is partly different. As shown by comparative evidence, the expression of Cause was one of the functions of the Indo-European ablative: Cause expressions in the ablative occur in Sanskrit and in Hittite (see Luraghi forthcoming a). The Indo-European instrumental case could also express Cause, as again shown by evidence from several languages, including Sanskrit, Hittite, Greek, and Slavic. So the merging of the two cases in Latin did not bring about any semantic conflict in the case of Cause. Among prepositional phrases, the use of *prae* for Cause is of Indo-European origin, as argued in Dunkel (1990).

As already remarked above, the *Itin. Eger.* attests to a complete confusion between Cause and Purpose: this state of affairs anticipates the Romance sit-

uation, as shown by It. *per*, Fr. *pour*, and Sp. *por* (*para* was created during the Middle Ages but does not belong to the earliest Spanish varieties; Corominas 1954 s.v.). I return to this development in Section 6.2 below.[33]

The development of the causal meaning of *per* is interesting, because of the reflexes of this preposition in the Romance languages. According to Hofmann & Szantyr (1965: 241), the origins of this meaning must be seen in impersonal expressions such as *per aetatem licet* 'it is allowed through age', which according to the classification of semantic roles followed in this chapter should better be regarded as Means. I have argued in Section 5.2.2 that Means expressions extended to Cause in occurrences where events which are brought about are not in accordance with the intentionality of a co-occurring human entity. More Cause expressions occur in late technical texts, as the *Mulomedicina Chironis*, as shown in Hofmann & Szantyr (1965: 241).

6. Purpose

Common sources for Purpose expressions are allative markers, or markers of Recipient/Beneficiary. Another frequent source of Purpose expressions is Cause expressions.

Latin Purpose expressions include the plain dative (see Serbat 1996), the postpositions *causa* and *gratia* with the genitive, and various prepositional phrases, in particular with *ad* and *pro*. The use of the dative and of *ad* is motivated by a metaphor that equates Purpose with (abstract) Direction – according to Lakoff and Johnson (1980), "purposes are destinations" – and is in accordance with the predictions in Figure 6. (In the case of the dative, the existence of this metaphor has very interesting implications for a possible original meaning as Direction marker, a meaning that must have preceded the association of the Indo-European dative with animate nouns, and that can be found especially in Old Indic, and sporadically in Latin too).[34]

33. See Luraghi (2005a, 2005b) on the merger of Cause and other semantic roles in Late Latin, and on a similar development in Byzantine Greek.
34. On the use of the dative and of *ad* with the accusative in Purpose expressions, see Hofmann & Szantyr (1965: 86, 93, 220).

The dative of Purpose is limited to some special collocations, such as *auxilio mittere* 'to send as help' or *remedio adhibere* 'to use as a remedy', and has a close connection to the verb (see Hofmann & Szantyr 1965: 98). The preposition *ad* with the accusative is used in final clauses with the gerundive; its usage is described by Hofmann & Szantyr (1965: 373).

The use of *pro*, *causa*, and *gratia* demonstrates the fluidity of the border between Purpose and Cause:

(134) Liv. 7,25,6: *Latinos* ***pro sua libertate*** *potius quam* ***pro alieno imperio*** *laturos arma*
'Latins prefer to bear arms in defense of their own liberty rather than in support of an alien dominion'

(135) Sall. *Catil*. 51,5: *sed postquam bello confecto de Rhodiis consultum est, maiores nostri, ne quis* ***diuitiarum*** *magis quam* ***iniuriae causa*** *bellum inceptum diceret, inpunitos eos dimisere*
'yet, after the war was ended, and the conduct of the Rhodians was taken into consideration, our ancestors left them unpunished for fear that someone might say that war was made upon them for the sake of seizing their wealth, rather than of punishing their faithlessness'

(136) Cic. *S. Rosc*. 15: *quas, ut aequum est, familias* ***honestatis amplitudinisque gratia*** *nomino*
'families which I name, as it is right I should, because of their honor and dignity'

In Vulgar Latin there are more signs of confusion between Cause and Purpose, as shown by (137):[35]

(137) *Itin. Eger*. 36,2: *candelae autem ecclesiasticae super ducente paratae sunt* ***propter lumen*** *omni populo*
'over two hundred church candles have been arranged to provide light for all the people'

35. Sporadic extension of *propter* to Purpose also occurs in some post-Classical authors; see Hofmann & Szantyr (1965: 247).

6.1 Typological considerations

The occurrence of a specific case, the purposive, for coding Purpose is frequent in many of the languages of Australia. Usually, the purposive case also encodes Direction, Recipient, and Beneficiary (see Blake 1977; Dixon 2002); in other words, it mostly corresponds to the dative of the Indo-European languages. Indeed, the Proto-Indo-European dative, when occurring with inanimate nouns, may well be reconstructed as a purposive. The dative denotes transfer, and possibly its original function was to denote Direction; extension of the dative to Purpose is based on its directional meaning. The Latin dative inherited this function to a limited extent only; the preposition *ad*, which conformed to the same metaphor, occurs with gerunds.

In the case of NPs, Purpose is mostly coded as Location, based on a metaphor which does not imply any directionality, and displays a strong tendency to merge with Cause. As I have already noted in Section 5.3, the relation of Cause to Purpose constitutes an interesting issue. In the first place, different hypotheses have been made about the possible direction of semantic spread, querying whether it is unidirectional (either from Cause to Purpose, or from Purpose to Cause) or bi-directional. Croft (1991: 293), mostly on the evidence of English *for*, argues that Purpose expressions can extend their meaning to also express Cause, and that the spread is unidirectional. However, evidence from other languages easily shows that the relation is bidirectional. This can be demonstrated by means of the Latin data, some of which have been discussed by de la Villa (1994, 1995); in Luraghi (2005a) I have shown that in Greek the semantic spread proceeded from Cause to Purpose: the Ancient Greek preposition διά with the accusative, which coded Cause, developed a final meaning and extended to Purpose and Beneficiary in Byzantine Greek.

In both Latin and Ancient Greek, Cause and Purpose could be expressed through various spatial metaphors: in particular, Cause could be coded as Location or Source, and Purpose as Location or Direction. In both languages, a merger of the two semantic roles takes place only with prepositions that express Location, rather than Direction or Source. In Luraghi (2005a) I have suggested that Location expressions constitute in the first place a metaphor for the semantic role Reason, which in its turn provides an area of overlap for Cause and Purpose. As remarked in Radden (1989: 562), “The objects we

aspire for are usually also the cause for our aspiration": a reason is both the cause for an agent's intentional action, and the purpose at which this action aims. Merger of Purpose and Cause with prepositions that denote Location seems frequent in the Indo-European languages, but this matter has not been investigated outside Indo-European: for this reason, it is impossible to state its typological relevance; more research is needed on this topic.

6.2 Diachronic considerations

The ancient Indo-European languages attest to the final use of the dative with inanimate nouns. The dative of Purpose occurs for example in Sanskrit and, to a more limited extent, in Ancient Greek; in Latin, it is limited by lexical constraints. The preposition *ad* occurs with specific verb forms and should better be regarded as halfway between a preposition and a complementizer: indeed, in the Romance languages its reflexes have become complementizers and occur with non-finite Purpose clauses.

Purpose is mostly coded through reflexes of *pro* in Romance. As already noted in Section 5.3, Cause, Purpose, and Beneficiary merged completely in early Romance; as already remarked in Section 5.5, languages that have different prepositions for the two semantic roles restored the distinction in the Middle Ages.

7. Beneficiary

Beneficiary (also called Benefactive) is the role taken by the human in favor of whom a state of affairs is brought about. Variants include Behalf Beneficiary, a human on behalf of whom another human acts, and Malefactive, a human to the detriment of whom an action is performed. Spatial sources for Beneficiary expressions are markers of Direction or Location; often, in languages that have a dative case, Beneficiary is expressed by the dative, much like Recipient, a semantic role that I do not discuss in detail in this chapter because it is assigned to arguments rather than to adverbials.

Recipient and Beneficiary are sometimes treated as the same semantic role, as for example by de la Villa (1989; see also Croft 1991). Similarity

between the two semantic roles includes the fact that they are both typically assigned to human participants; furthermore, there is a conceptual link, provided by the assumption that if someone gives something to a recipient, the recipient is likely to benefit from the gift. However, there are also important differences between Recipient and Beneficiary: while Recipient implies a concrete transfer, Beneficiary does not, as (138)–(139) show:

(138) *John gave Mary the book*

(139) *Mary bought a book for her mother*

While (138) implies that the gift has been moved from the agent to the recipient, and one can conclude that the recipient has it as a result of the event, no such assumption can be done based on (139). (See further Kittilä 2005 and Luraghi forthcoming b.)

7.1 Prototypical Beneficiary

In Latin, Beneficiary can be coded through the plain dative, as in (140) and (141) (see also *sibi* in (42) above), or, most often, through *pro* with the ablative, as in (142), or *causa* and *gratia* with the genitive, as in (22); occasionally, *in* with the accusative can also code prototypical Beneficiary (most often it denotes Malefactive, see Section 7.3):

(140) Catull. 8,8: *fulsere uere candidi* ***tibi*** *soles*
'truly, bright days once used to shine on you'

(141) Cic. *Cato* 25: *nec uero dubitat agricola, quamuis sit senex, quaerenti* ***cui*** *serat, respondere:* ***dis inmortalibus***
'and certainly a farmer, even if he is an old man, does not hesitate to answer somebody who asks for whom he is sewing: for the immortal gods'

(142) Liv. 42,9,3: *aduersus se* ***pro hostibus*** *senatus consultum fecisset*
'(the praetor) had proposed a decree of the Senate directed against the consul and in favor of the enemy'

In Plautus, *pro* often occurs with human landmarks but mostly denotes exchange, as in (125), or in (143):

(143) Plaut. *Cist*. 571: *ego amicae meae dedi, quae educaret eam* ***pro filiola*** *sua*
'I gave her to a friend so that she can raise her as her own daughter'

In (143) it is not said that the agent raised someone "for the sake of her daughter", as a Beneficiary meaning would imply, but rather "as if she were her daughter": the meaning of *pro* here is based on the notion of exchange, already described in Section 5.3.

Occurrences where *pro* does express Beneficiary are few; an example is (144):

(144) Plaut. *Epid*. 414–416: *te* ***pro filio*** */ facturum dixit rem esse diuinam domi, / quia Thebis saluos redierit*
'he said that you were going to offer a sacrifice at home for your son, because he had returned safe from Thebes'

As already anticipated in Section 5.3, Beneficiary merged with Cause in Vulgar Latin; accordingly, *propter* occurs in Beneficiary expressions in the *Itinerarium*:

(145) *Itin. Eger*. 38,15: *totum ad momentum fit* ***propter populum****, ne diutius tardetur*
'everything is done quickly for the people, in order for them not to wait too long'

7.2 "Behalf" Beneficiary

Acting in someone else's place usually implies acting for his/her benefit: Behalf is a common extension of prototypical Beneficiary, often coded in the same way. In Latin, Behalf is expressed by *pro* with the ablative:

(146) Cic. *Verr*. 3,204: *multa Sosippus Agrigentinus apud Cn. Pompeium consulem nuper, homo disertissimus et omni doctrina et uirtute ornatissimus,* ***pro tota Sicilia*** *de aratorum miseriis grauiter et copiose dixisse ac deplorasse dicitur*
'Sosippus of Agrigentum, a most eloquent man, adorned with every sort of learning and with every virtue, is said to have spoken

recently before Gnaeus Pompeius, when he was consul, on behalf of all Sicily, about the miseries of the farmers, with great earnestness and a great variety of arguments'

Similar to prototypical Beneficiary, Behalf is seldom coded through *pro* in Plautus, an example is (147):

(147) Plaut. *Most.* 1131: *ego ibo* ***pro te****, si tibi non libet*
'I will go in your place, if you don't want to go'

7.3 "Malefactive"

Malefactive can be expressed by *in*, *adversus*, or *contra* with the accusative:

(148) Sall. *Catil.* 9: *in bello saepius uindicatum est* ***in eos****, qui contra imperium* ***in hostem*** *pugnauerant*
'in time of war punishment was more often inflicted against those who had attacked the enemy against orders'

(149) Tac. *ann.* 1,3: *bellum ea tempestate nullum nisi* ***aduersus Germanos*** *supererat*
'he had no war on his hands at the time except against the Germans'

7.4 Typological considerations

In languages that have a dative case, Beneficiary is often coded through the dative. The data in Lehmann, Shin, and Verhoeven (2000) show that the dative can express Beneficiary in many genetically unrelated languages, such as Turkish, Korean, and Wardaman (Australian, non-Pamanyugan). A number of other languages, such as Tamil, encode Beneficiary through a complex adposition with the meaning 'for the sake of', which takes the dative case (Andronow 1969). The coding of Beneficiary through the dative is also common in the Pamanyugan languages, see Dixon (2002). Furthermore, since the dative is often used for coding Purpose, polysemy of Purpose and Beneficiary is quite common.

As I have shown, the Latin dative was also used for Beneficiary; however, Latin mostly made use of the preposition *pro* with the ablative. It is no wonder that the coding of Beneficiary often requires extra morphology in languages that employ the dative, since Beneficiary can co-occur with Recipient and in such cases the two semantic roles need to be kept distinct, as in (150):

(150) *Mary gave me a present for my sister.*

The original meaning of *pro* was 'in front of', and it is only occasionally attested: its most frequent use in Early Latin was to indicate substitution (see Section 5.3 above). Cause, Purpose, and Beneficiary evolved out of this latter meaning. It would be interesting to know how frequently the notion of substitution is used to conceptualize Beneficiary in genetically unrelated languages, but, as far as I know, there are no studies on this matter.

The Oceanic languages typically employ the genitive to encode Beneficiary (see Song 1998). This seems to be an areal feature, but it is worth mentioning because coding of Beneficiary and Possessor in the same way is also found in Latin (and in the other Indo-European languages); it does not involve the genitive case, but rather the dative (dative of possession, see Baldi and Nuti, this work, vol. 3).

7.5 Diachronic considerations

Latin inherited from Proto-Indo-European the use of the dative for Beneficiary.[36] Many other Indo-European languages preserve this function of the dative and also display a variety of adpositional phrases for Beneficiary, so Latin may be thought to have inherited this second pattern as well, though not to have inherited a specific preposition. Note that the typical prepositions for Beneficiary are prepositions that also denote Purpose or Cause; when they have a spatial meaning, they denote some sort of Location, rather than Direction (the latter is more common for Malefactive).

As for the development of Beneficiary expressions in Vulgar Latin and later, I have already remarked in Sections 5.5 and 6.2 that it merged with

36. On the dative in the Indo-European languages, see Havers (1911).

Cause. Note that this merger does not concern the plain dative, which can under some circumstances still be used as Beneficiary in the Modern Romance languages (it is the only non-argumental usage of pronominal clitics).

8. Experiencer

In the Indo-European languages, the subject of perception verbs and verbs denoting emotional states is most often treated as the subject of action verbs; so, formally, Experiencer is treated as Agent. Furthermore, even in cases where this is not true (e.g., impersonal verbs), the role Experiencer is assigned to arguments of the verb and not to adverbials. The only relevant type of Experiencer that is syntactically an adverbial is the so-called *dativus iudicantis*:

(151) Sall. *Catil.* 13: ***quibus*** *mihi uidentur ludibrio fuisse diuitiae*
'to such men their riches seem to me to have been but a plaything'

(152) Cic. *Cato* 4: *numquam* ***tibi*** *senectutem grauem esse senserim quae* ***plerisque senibus*** *sic odiosa est, ut onus se Aetna grauius dicant sustinere*
'I never had the feeling that old age is such a big weight for you, while for most elderly people it is so heavy, that they say they bear a weight bigger than Mount Aetna'

(Note the co-occurrence in (151) of two datives, denoting two types of Experiencer: the first, *quibus*, is the *dativus iudicantis*, which we can define as an external experiencer; the second one, *mihi*, is the second argument of the verb *uidentur*).

The *dativus iudicantis*, or dative of reference, is the role taken by the human entity from whose vantage point a certain statement is true. Example (151) demonstrates the connection, and the difference, between Beneficiary and this type of Experiencer. In the passage it is not said that the participants denoted by *quibus* had a benefit from the riches that they had as toys, but rather that they considered their riches to be toys: some type of mental process is implied from the side of the experiencer.

9. Comitative

9.1 Prototypical Comitative

Comitative is a semantic role prototypically assigned to humans who perform an action together with another participant, whose vantage point is chosen as primary. Occurrences of Comitative *cum* can be found in (2), (17), and (33); a further example is (153):

(153) Catull. 67,35–36: *sed de Postumio et Corneli narrat amore / **cum quibus** illa malum fecit adulterium*
'for she talks of the loves of Postumius and of Cornelius, with whom that one committed foul adultery'

Especially with nouns that denote military forces, Comitative can be coded through the plain ablative (the *ablativus militaris*), as in (154):

(154) Liv. 1,23,3: *Albani priores **ingenti exercitu** in agrum Romanum impetum fecere*
'the Albans were the first to invade the Roman territory with an immense army'

Nouns such as *exercitus* denote pluralities of marginally individuated human entities, similar to collective nouns; low individuation makes such entities similar to inanimate entities.

9.2 Accompaniment

Inanimate entities that in some sense can be conceived of as accompanying an agent are commonly expressed as Comitative too, in sentences such as (155):

(155) *The boy goes to school with his books.*

The semantic role of this nonprototypical comitative is called Accompaniment. In Latin, it is sometimes kept distinct from prototypical Comitative in its formal expression. Normally the preposition *cum* occurs not only for Comitative proper – that is, with nouns that denote human beings, but also for all other relations of accompaniment, as in (156):

(156) Cic. *Catil.* 1,32: *obsidere* ***cum gladiis*** *curiam*
'besiege the Senate-house with swords'

In Late Latin one would expect to see the spread of *cum* to Instrument at its onset. A study of the spread of PPs, and especially those involving *cum*, in place of the plain instrumental ablative is Beckmann (1963). The author tries to single out what he calls *Übergangsfälle* between Comitative and Instrumental from Plautus onward. An example is (157):

(157) Plaut. *Pseud.* 756–757: *hominem* ***cum ornamentibus omnibus /*** *exornatum adducite*
'bring the man here, dressed up with all his adornments'

where the past participle, with its passive meaning, can favor the shift from Accompaniment to Instrument. However, as I have already mentioned in Section 5.2.1, unambiguous occurrences of instrumental *cum* with nouns that denote prototypical instruments, agent expressions, and action verbs occur only starting with late technical texts, as shown in (96).

The plain ablative, too, could express Accompaniment. According to Bennett (1914: 299), this usage was infrequent in Early Latin: he only lists three examples, one of which is (158):

(158) Plaut. *Amph.* 219: *postquam utrimque exitumst* ***maxima copia***
'after they had gone forth on either side in full array'

9.3 Attendant Circumstances

According to Dirven (1993: 91), Attendant Circumstances "is a conceptual domain that refers to a situation occurring or holding at the same time as or in a close vicinity of some other situation; though some link between the two situations is implied, the nature of this link is not specified". Comitative expressions often extend to Attendant Circumstances, as in (159):

(159) *With such bad weather I won't go out.*

Attendant Circumstances can be expressed through the plain ablative or *cum* with the ablative, both in Early and in Classical Latin:

(160) Plaut. *Amph.* 1090–1091: *inuocat deos immortalis, ut sibi auxilium ferant, /* ***manibus puris, capite operto***
'she called on the immortal gods to help her with clean washed hands and covered head'

(161) Enn. *ann.* 484: ***cum sonitu magno*** *... certant*
'they fight with a great noise'

(162) Liv. 3,31,6: *uterque* ***magna*** *patrum* ***indignatione*** *damnatur*
'both were condemned, greatly to the indignation of the patricians'

(163) Cic. *Verr.* 1,63: *accidit ... ut illo itinere ueniret Lampsacum* ***cum magna calamitate*** *et prope* ***pernicie*** *ciuitatis*
'he happened in the course of his journey to arrive at Lampsacum, with terrible and almost ruinous consequences to that community'

Predicative constituents can also be regarded as expressing Attendant Circumstances:

(164) Cic. *epist.* 16,7: ***carus*** *omnibus* ***expectatus****que uenies*
'your arrival is eagerly expected, and you will find an affectionate welcome from everyone'

(Another example is *priuatum* in (174).) Predicative adverbials usually refer to either the subject or the object of a sentence and agree in case and number. This is the only type of adverbial in which the nominative case can occur. Predicative adverbials in the nominative are mostly participles.[37]

9.4 Typological considerations

I have already mentioned in Section 5.2.1 the frequent polysemy of Comitative markers, which often extend to Instrument. Among languages in which Comitative and Instrument are coded differently, Stolz (1996, 1998) describes a subtype, where Comitative is encoded by the same morpheme as Instrument plus another morpheme. This subtype is fairly frequent among the Indo-European languages, including Latin. I discuss the diachrony of such a type

37. On predicative adverbials see Pinkster (1981, 1995: chap. 8) and Vester (1983: chap. 11).

of marking in Section 9.5 below; here it must still be noted that, while *cum* is virtually obligatory for prototypical Comitative – that is, for accompanying human participants, nonprototypical Comitative, as well as Attendant Circumstances, can often take the plain ablative. Cross-linguistic comparison shows that languages vary as to the point at which, on a scale that goes from Comitative to Instrument, the change in the means of coding is located. Such a scale can be set up as in Figure 7.

Comitative > Accompaniment > Attendant Circumstances > Instrument

Figure 7. Comitative/Instrument scale

In Latin, the plain ablative can be used under certain circumstances for all items in the scale below Comitative, but its use is the default only for Instrument. Most often, Accompaniment and Attendant Circumstances are encoded through the same formal means as Comitative: *cum* with the ablative. This is not so in all languages in which Comitative and Instrument are encoded differently: in Arabic, for example, the preposition *'im* encodes Comitative, while Accompaniment and Attendant Circumstances are encoded by *b-*, the same preposition that also denotes Instrument. So we have the two opposite situations shown in Table 4.

Table 4. Coding of semantic roles related to Comitative

	Latin	Arabic
Comitative	*cum*	***'im***
Accompaniment	*cum*	*b-*
Attendant Circumstances	*cum*	*b-*
Instrument	**abl.**	*b-*

9.5 Diachronic considerations

An interesting question regards the extent to which the Indo-European instrumental could express Comitative without pre- or postpositions. In fact, the Sanskrit instrumental could express Instrument, Comitative, and Agent

(among other functions). Polysemy involving Agent and Comitative is most infrequent, as argued in Luraghi (1986, 2001a, 2001b) and Stolz (1999). Most likely the function Agent was not primary for the instrumental case in Sanskrit: as I have argued in Section 5.5, Proto-Indo-European did not have a specific way of coding Agent with passive verbs. Indeed, the plain instrumental codes Comitative in Sanskrit, but, especially after the Vedic period, it is most often accompanied by an adverb or postposition that means 'together', while Agent with passive verbs always remains coded through the plain instrumental. Apparently, semantic roles typical of human participants, such as Comitative and Agent, tend to be kept formally distinct.

Polysemy involving Instrument and Comitative must have been pre-Indic and possibly go back to Proto-Indo-European. Cross-linguistic evidence shows that this (frequent) polysemy arises starting with a Comitative meaning (see Stolz 1996; Luraghi 2001b, 2003a); this apparently also holds for Sanskrit: Delbrück (1867: 50) remarks that the basic function of the Sanskrit instrumental was "der des zusammenseins" ('that of being together'). If we have a look at historically attested cases, it is easy to find examples of the extension Comitative > Instrumental in the Indo-European languages. Latin *cum* itself is a good example: its meaning did not include Instrument in Classical Latin, but it extended to this semantic role later.

There is evidence from the Slavic languages for a "cycle": at an early stage, the instrumental could express both Instrument and Comitative; later, Comitative receives further marking through a preposition that takes the instrumental; in languages such as Bulgarian, which have lost grammatical cases, the same preposition can express Instrument and Cause. So we have:

– Step one: instrumental = Instrument + Comitative
– Step two: instrumental = Instrument; *s* (or related prepositions) plus instrumental = Comitative
– Step three: *s* plus instrumental = Instrument + Comitative

(Other examples are available from Greek, Germanic, and others; see Luraghi 2001b).

The tendency to add an adposition to the instrumental case for encoding Comitative is common to numerous Indo-European languages; Latin may well have inherited this pattern from Proto-Indo-European. Throughout the history of Latin, the expression of Comitative remains stable: most of the Romance languages have inherited the same preposition for this purpose,

and those which have not have replaced the preposition but have preserved the pattern. Since the merger of Comitative and Instrument occurs in all the Romance languages, including those that have lost the preposition *cum*, it seems likely that the two semantic roles had fallen together already before this preposition disappeared.

10. Area

Area is the semantic role assigned to the topic of verbs of communication (Dirven 1995: 113); in a broader sense, Area can also be defined as "the thematic context or field within which an event is seen" (Radden 1989: 448). These two variants of the semantic role, which below I label Topic and (Limits of) Quality, are coded differently in Latin.

10.1 Topic

Topic is coded through *de* with the ablative, as in titles of literary works (*de bello civili* 'The Civil War'; *de rerum natura*, 'On the Nature of Things'); an example is (165):

(165) Cic. *Verr*. II 1,72: ***de quo*** *ne multa disseram tantum dico, …*
'in order not to discuss this matter at length, I will only say … '

(Several other occurrences of *de* in Topic expressions can be found in the examples in the preceding sections, see (25), (47), (61), (146), and (153)).

Note that, being connected with situations in which humans communicate, Topic implies some type of intentional mental activity. For this reason, Topic expressions come close to Reason (and hence Cause or Purpose), as in (166):

(166) Sall. *Iug*. 112: *Bacchus … daret operam ut una ab omnibus quasi* ***de pace*** *in colloquium ueniretur, ibique sibi Sullam traderet*
'Bacchus should endeavor to bring all parties together in a conference for peace, as if to settle the conditions, and then deliver Sulla into his hands'

Such usage is common with verbs of fighting, as in (68) above and in (167):

(167) Caes. *Gall.* 5,3,2: *in ea ciuitate duo* ***de principatu*** *inter se contendebant, Indutiomarus et Cingetorix*
'in that state, two persons, Indutiomarus and Cingetorix, were then contending with each other for the supreme power'

In such cases the shift to Reason seems fully accomplished; the reason is conceived of as the topic of contention.

10.2 Limits of a Quality

Quality is coded through the plain ablative (*ablativus limitationis*) in Latin, as in (168)–(170):

(168) Sall. *Catil.* 25: *haec mulier* ***genere atque forma****, praeterea* ***uiro liberis*** *satis fortunata fuit*
'in birth and beauty, in her husband and children, this woman was abundantly favored by fortune'

(169) Cic. *dom.* 130: *hic tribunus plebis* ***scelere et audacia singulari***
'he is a tribune of the plebs, unparalleled in criminal effrontery'

(170) Caes. *Gall.* 6,12: *si quis ex reliquis excellit* ***dignitate***
'if one of the others is preeminent in position'

11. Manner

While many of the semantic roles typical of adverbial NPs may also be expressed by adverbs, this possibility is most widespread for Manner. Languages typically rely on one or more derivational affixes to form manner adverbs; the formation of manner adverbs is often so regular that it comes close to inflectional processes (Greek grammarians often described the adverbial ending -ως of manner adverbs as representing a sixth case).

As noted in Vester (1983), it is sometimes hard to distinguish between Attendant Circumstances and Manner, or Instrument and Manner (or Means

and Manner as well). A possible way of establishing whether an adverbial has the role Manner would be to paraphrase it with an adverb, or with the expression "in a ... manner", but for obvious reasons this is impossible with Latin. Discussing possible functions of converbs, which like adverbial NPs can express Manner or Attendant Circumstances, König (1995: 65–66) argues that "the former term [scil. Manner] should only be used for sentences describing two aspects or dimensions of only one event. ... The term 'attendant circumstance', by constrast, should be used for cases where two independent events or actions are involved, either of which could be stopped without affecting the other, but which manifest a unity of time and place and thus also a 'perceptual unity'". French examples are (171)–(172):

(171) *Elle traversa le fleuve en nageant.* (Manner)

(172) *Dit-il en se levant.* (Attendant Circumstances)

Still, it is not easy in the case of PPs to distingish between "two dimensions" of an event and two events constituting a "perceptual unity"; furthermore, this distinction leaves out Instrument. From a cognitive point of view, there seems to be a continuum between Instrument and Manner, and in some cases it is impossible to make a sharp distinction between semantic roles. The following examples from Vester (1983: 57–58) demonstrate the overlap of Manner and Instrument (or Means, a semantic role that Vester does not use):

(173) Cic. *div*. 1,21: *qui populos urbisque* ***modo ac uirtute*** *regebant*
'whose rule over peoples and cities was just and courageous'

(174) Liv. 3,11,13: *quem priuatum* ***uiribus et audacia*** *regnantem uidetis*
'whom you see ruling as a private citizen by virtue of his strength and boldness'

Manner is most often coded through the plain ablative, *cum* with the ablative, or *per* with the accusative: in other words, it is most often coded as Instrument, Attendant Circumstances, or Means, in accordance with possible areas of overlap as discussed above. Examples of Manner adverbials are (175)–(178):

(175) Cic. *prov*. 41: *quae ego omnia non* ***ingrato animo****, sed* ***opstinatione*** *quadam sententiae repudiaui*
'all these offers I rejected with firm adherence to my principles, but not without a feeling of gratitude'

(176) Cato *agr*. 42: *ficos et oleas* ***altero modo***
'(how to graft) figs and olives in another way'

(177) Cic. *Quinct*. 61: *qui primus erat offici gradus seruatus est a procuratore* ***summa cum diligentia***
'his first duty as an agent was discharged by him with the greatest care'

(178) Sall. *Catil*. 42: *namque illi, quos ante Catilinam dimiserat, inconsulte ac ueluti* ***per dementiam*** *cuncta simul agebant*
'for those whom Catiline had sent on ahead were doing everything at once, acting imprudently and almost insanely'

12. Cases and prepositions

12.1 The distribution of plain cases and PPs in Latin Adverbials

Pinkster (1985) wrote that the Latin ablative should be considered the case of adverbials. He posited a strategy for the use of cases in Latin, "always use a residual case", in which cases are considered residual based on the scale shown in Figure 8.

Nominative	>	accusative	>	dative	>	ablative
1arg		2arg		3arg		satellites

Note: The genitive is not included in the scale because it is used for nominal dependents.

Figure 8. Syntactic functions of cases in Latin

Obviously this scale makes the right prediction for the nominative case; the accusative, when used without prepositions, also conforms to it for the most part, given the fact that its adverbial use is seriously restricted. The dative, on the other hand, has a wide adverbial usage, since it can express

Table 5. Semantic functions of cases/PPs in Latin

dative	+anim.	Beneficiary, Experiencer
	−anim.	Purpose
ablative	Instrument, Cause, Area	
PP	all other adverbials	
subsystem of spatial relations	locative/ablative	Location
	accusative	Direction
	ablative	Source

Purpose, Beneficiary, and Experiencer. These semantic roles are closely related in meaning, and, in much the same way, they are related to the semantic roles of the arguments that typically take the dative, such as Recipient and Addressee (while Experiencer is most often assigned to arguments). Most of these semantic roles are assigned to humans; the only one which is typical of inanimates is Purpose. Indeed, Purpose seems to be distinct from Beneficiary through the feature of animacy only (see the discussion in Luraghi 2003a and forthcoming b).

The Latin ablative has very limited use in argument position; its most frequent function as an adverbial is to denote Instrument, Cause, and Area (Quality), and it typically occurs with inanimate nouns.[38] Cause and Quality are semantic roles frequently associated with Instrument.

The occurrences of prepositional ablative constitute a recessive group, which can be viewed as a subgroup of prepositional phrases. By contrast, the accusative, in spite of having limited adverbial use as a plain case, is the most frequent case with prepositions, and the only productive one.

Based on these remarks, one can work out the classification of the functions of cases for adverbials shown in Table 5.

In other words, a picture emerges in which, beside the "grammatical cases", Latin had specific cases for denoting Instrument (and related semantic roles) and Purpose, while the dative encoded most semantic roles, argumental or adverbial, taken by human entities. Local cases were limited to toponyms.

38. On the function of the ablative as the case of adverbial NPs see further Serbat (1989) and Luraghi (1987).

Furthermore, one of the grammatical cases, the accusative, also functioned as complement of prepositions.

From a typological point of view, the case system of Latin is not unexpected. Case systems that also include cases for semantic roles, besides cases for grammatical relations, typically have a set of local cases; the most frequent nonlocal cases are the instrumental and the purposive (see Luraghi 1991).

From the point of view of Proto-Indo-European, one must of course consider the loss of the locative, while the ablative still functions as such only under lexical constraints: note however that the syncretism of ablative and instrumental had the effect of merging two cases that could already partly express the same semantic role outside local ones, namely, Cause. Another major difference is the high degree of grammaticalization of prepositional phrases. Apart from these two changes, the Latin case system is fairly conservative.

12.2 Internal structure of PPs

According to a rigid definition of government, in keeping with classical structuralism, when case variation is connected with different meanings an adposition cannot be said to "govern" a NP, but it should rather be regarded as modifying it (see for example Lehmann 1983a, 1983b). Following this approach, one should speak of two groups of prepositions in Latin, depending on the type of relation holding between the preposition and a co-occurring NP: (i) prepositions that do not allow for case variation, and govern their NPs, and (ii) prepositions that can take different cases, and modify their NPs.

12.2.1 The Indo-European preverbs: Categorial status

Such a distinction may be insightful as far as the historical development of prepositions is concerned: as is well known, primary adpositions in the Indo-European languages are ancient adverbs, belonging to a special class, called "preverbs", that underwent a process of grammaticalization. The Indo-European languages preserve different stages in the grammaticalization process: in Sanskrit and Homeric Greek, for example, preverbs could also func-

tion as independent adverbs, while this was not possible even in Early Latin, where they had either coalesced with verbs[39] or had become prepositions.

Far from being a peculiarity of the early Indo-European languages, such ambiguous categorial status, halfway between preposition and adverb, also occurs elsewhere and is brought by the ongoing renovation of adpositions.[40] If we limit our analysis to the Romance languages, we can see that many of the Latin prepositions have disappeared and been replaced by new ones created out of former adverbs. These items, too, often present problems if one tries to assign them to a specific word class, as well as from the point of view of the relation (modification or government) that holds between them and the co-occurring NP. Consider the following Italian examples:

(179) *Vado dentro.*
'I go inside'

(180) *Vado dentro alla stanza.*
'I go into the room'

(181) *Vado dentro, nella stanza.*
'I go inside, in the room'

(182) *Vado all'interno della stanza.*
'I go into the interior of the room'

In (179) *dentro* is an adverb, but in (180) it is a preposition, because it determines the choice of the other preposition *a*. In (181) *dentro* is again an adverb, modified by an apposition, the PP *nella* (*in* + DET) *stanza*, which expresses the same semantic relation as *dentro*. In fact, this is the earliest type of construction that appeared historically, and it was already attested in Latin, where the adverb *intro* mostly occurred alone:

(183) *Bell. Afr*. 88: *ferrum* ***intro*** *clam* ***in cubiculum*** *ferre*
'to bring the weapon secretly inside, in the bedroom'

39. Cases where preverbs can still occur separately from verbs are very few in Latin; see Hofmann & Szantyr (1965: 217).
40. On ongoing grammaticalization of adpositions in the ancient Indo-European languages, especially concerning Latin, see Baldi (1979), Lehmann (1983b), Coleman (1991), Vincent (1999), and Luraghi (2001c).

Italian adverbial prepositions may have a modifier with the preposition *di*, which expresses nominal dependency. In Italian this does not happen with *dentro*, an old adverb that derives from a Latin adverb, while modifiers of the latter type usually occur with adverbial heads of more recent nominal origin. The preposition *di* can occur with *interno*, as in (182), which still has its nominal character.

In sum, the same element can behave, within the same language and at the same time, as an adverb or as an adposition; furthermore, it can stand in a variety of relations with a co-occurring NP.

12.2.2 A scalar definition of government

Let us now return to the notion of government. Diachronically the occurrence of different cases with the same adpostion is not problematic, since government often derives from modification. So if one adopts a diachronic perspective, one can see a motivation for the occurrence of different cases with the same adposition. At an early stage, adverbs were appositions of nouns. Later, nouns became dependents (modifiers), and still later developed from modifiers into complements. At an advanced stage of grammaticalization, the case marker on the NP only indicates that the NP is the complement of a preposition:

> The more a case affix is grammaticalized, the more it comes to express ... just these syntactic relations. This is the relation of the nominative to the subject relation, ... and of the oblique grammatical cases to the preposition–complement relation. The attraction of an NP into the valence of its controller, so that it ceases to be a modifier, and the grammaticalization of the case suffixes are thus two processes that condition each other. ... Throughout the history of the Latin language, we observe a steadily increasing presence of government. The first step in this direction was the subordination of an NP to the adverb that accompanied it, and thus the creation of prepositional government. (Lehmann 1985: 95–96).

I have already remarked that case variation is very limited in Latin: it basically only involves three prepositions, *in*, *sub*, and *super*. We have seen in Section 3.1 a number of other prepositions, including *ad* and *apud*, that could express either Location or Direction and only took the accusative. This is also true of adverbial prepositions:

(184) Plaut. *Trin*. 909: *non placet qui amicos* ***intra dentes*** *conclusos habet*
'I don't like a person who keeps his friends between his teeth'

(185) Plaut. *Truc*. 42–43: *si …* ***intra pectus*** *se penetrauit potio*
'if the drink penetrated into (his) breast'

As I have argued previously (Luraghi 1989: 262), "The opposition rest/motion … does not need any marker, since it is immediately recoverable from the context. …. Hence the case morpheme with prepositions like *in* can at most carry redundant information, just as with prepositions always taking the same case". In other words, already in the Classical period the productivity of cases within the Latin PP was very low, and cases without prepositions still preserved a spatial meaning limited to some toponyms. Note further that this usage is highly idiosyncratic, as demonstrated by the fact that Location is expressed, depending on the inflectional class of the toponym, by the ablative or by the locative (which is synchronically a genitive).[41]

Lehmann (1999) summarizes the differences between adverbs and adpositions as in Table 6.

Table 6. Dependents of adverbs and adpositions

	Adverb	Adposition	
a.	Dependency relation	modified by dependent	governs dependent
b.	Dependent	optional	obligatory
c.	Case relator or dependent	freely chosen according to meaning	uniquely determined by superordinate element

In light of the above criteria, an interesting example of the development from body part noun to adverb is the English word *ahead*, which can occur either alone, or with a dependent *of* phrase. *Ahead* represents a less grammaticalized stage than the Latin prepositions, because its dependent is optional and can be viewed as a modifier (from this point of view the phrase headed by

41. A few words also have a separate locative case, such as the word for 'home': *domi* (loc.) / *domus* (gen.) / *domo* (abl.).

ahead is endocentric), but, according to criterion (c) in Table 6, it is a complement, since *ahead* uniquely determines the occurrence of the preposition *of* in the dependent phrase. So one can claim that *ahead* constitutes a parallel to Latin *in*, *sub*, and *super* which governs its dependent according to criterion (b), but raises problems if one considers it in light of criterion (c).

In order to build a scale by which we can say that we have instances of more or less prototypical government, we need an independent definition of government. Such a definition can be given in purely syntactic terms. Moravcsik (1995: 708) defines government as follows: "Constituent A governs constituent B if the syntactic function of B depends on A".

The function of the noun phrases in Latin PPs is determined by the prepositions, even in the case of prepositions with case variation (except for a small number of toponyms): the NPs are complements of prepositions, and as such they cannot occur alone (as they could if their relation to their head were appositional, for example as in *nella stanza* in (181). Note that, by this criterion, the case of *ahead* is slightly different. On the one hand, it is true that *ahead* requires its dependent to be marked by the preposition *of* and that, most likely, a PP with *of* could not substitute for a PP with *ahead* (+ *of* . . .). This depends on semantic, rather than syntactic, factors. Compare (186)–(188):

(186) *Mary came ahead of time.*

(187) **Mary came of time.*

(188) *Mary came on time.*

So on a scale of prototypicality, prepositions which meet all the above criteria (such as Latin *ad*, which only takes the accusative, or *cum*, which only takes the dative) score the highest; a preposition such as Latin *in* constitutes a case of less prototypical government; finally, while the relation between *ahead* and its dependent, while also displaying a feature of government, is closer to modification.[42]

42. A more elaborate discussion of this issue can be found in Luraghi (2009).

13. Summary: From Proto-Indo-European to Early Romance

13.1 Adverbials in Proto-Indo-European

Proto-Indo-European had a case system which included a larger number of cases than did Latin, and the cases that Latin lost were mostly used for adverbials: consequently, the role of prepositions in Latin is important for adverbial NPs. Note that the cases that can be reconstructed as having had mostly adverbial function in Proto-Indo-European, namely, the locative, the ablative, and the instrumental, all merged into the Latin ablative, which, as I have remarked in Section 12, is often regarded as the case of adverbials.[43] Functional merger was accompanied by morphological merger, and some differences between the reflexes of the different endings can still be seen in Early Latin, as shown in Prat (1975); see further Vine (1993).

Latin retained cases used for core relations, as well as the genitive, which was used for nominal dependency. Leaving out this last case, and generalizing broadly, we can summarize the functions of cases in Proto-Indo-European as in Table 7.

Table 7. Syntactic/semantic functions of cases in PIE

Case	Argument	Semantic role as Adverbial
Nominative	1st	(Predicative)
Accusative	2nd	Direction
Dative	3rd	Agent, Experiencer, Beneficiary [+animate] Purpose [−animate]
Ablative	–	Source, Cause
Locative	–	Location
Instrumental	–	Instrument, Cause, Area [−animate] Comitative [+animate]
Adpositional phrases	–	Cause

43. In Luraghi (1987), I have argued that the basis for syncretism of locative, ablative, and instrumental in Latin was syntactic, being connected with the frequency of these cases at the Adverbial level. On case syncretism in Latin see also Meiser (1992).

Table 8. Syntactic/semantic functions of cases in Latin

Case	Argument	Semantic role as Adverbial
Nominative	1st	(Predicative)
Accusative	2nd	(Direction)
Dative	3rd	Agent, Experiencer, Beneficiary [+animate] (Purpose [−animate])
Ablative	–	Instrument, Cause (Source, Location)
Prepositional phrases Purpose, Comitative, Agent	–	Location, Direction, Source, Cause,

In Latin we find the functions of cases as in Table 8. The biggest change is that a subsystem of existing cases for local roles is limited to toponyms; other types of NP rely on prepositions. Note further that the expression of Agent through a PP does not constitute a replacement of an earlier expression through a plain case but is an innovation (passive agents with finite verb forms cannot be reconstructed for Proto-Indo-European, see Sec. 5.1.1).

13.2 Formal aspects of the evolution into Early Romance

The most dramatic change from Late Latin to Romance is of course the loss of the case system. Within PPs, cases were virtually nondistinctive in Latin already. Loss of the plain ablative in Instrument function must be comparatively late, even though phonological changes that helped bring it about were already around in the first century CE (loss of final nasals and vowel length, see Allen 1978). The dative as it survives in the Romance languages is limited to some personal pronouns, but its use is mostly restricted to arguments.

As a result of the disappearance of cases, the semantic roles of adverbials are all coded through PPs. This change can be seen as an ongoing process, which had already started in Proto-Indo-European, where some adpostions can be reconstructed as coding specific semantic roles (notably Cause). The reduction of the case system from Proto-Indo-European to Latin basically affected only the Adverbial level, so the use of prepositions increased with respect to Proto-Indo-European, especially for coding spatial relations. This

process is complete, as far as adverbials are concerned, in the Romance languages.

13.3 Semantic aspects

In Early Romance the distinction between Location and Direction was lost, and both semantic roles were coded as one, with the verb playing a role in disambiguation. This situation, which still exists in most Romance languages, also existed in Latin already, for prepositions that did not allow case variation (the vast majority).

The disappearance of *ab* caused changes in the expression of several semantic roles; in the case of passive Agent, most Romance languages replaced *ab* with *de*, thus continuing the Source/Origin metaphor, while Gallo-Romance changed the metaphor by coding agent as Intermediary (French *par*). Note that Gallo-Romance is the only variety which preserves two different prepositions, emerging as French *par* and *pour*, that continue *per* and *pro*, while in all other varieties only one form is attested (It. *per*, Med. Span. *por*). The Romance languages allow coding of Force as Agent; that is, they do not have a grammaticalized means of expressing Force.

Beneficiary and Purpose merged with Cause in Late Latin. Further merger of Cause/Beneficiary with Means/Intermediary only affected some of the Romance languages and is related to retention or nonretention of the different prepositions deriving from *pro* and *per*, discussed above.

Because the ablative was the case that was most involved in coding adverbials without prepositions, I summarize the changes that affected it in Figure 9. The semantic roles coded through the ablative can be divided into two groups: on the left, causal semantic roles (in keeping with the order in Figure 6); and on the right, semantic roles close to Comitative and Attendant Circumstances. The semantic roles in Figure 9 were partly coded through prepositions (not necessarily with the ablative), such as *per*, as shown in second line, but the ablative was generally also possible.

The bidimensionality of Figure 9 does not do justice to all of the complex relations that hold among semantic roles. In the first place, there are contacts across the two groups. The semantic roles that appear to be more in contact are Manner and Means: as we have seen, Manner is close both to Attendant

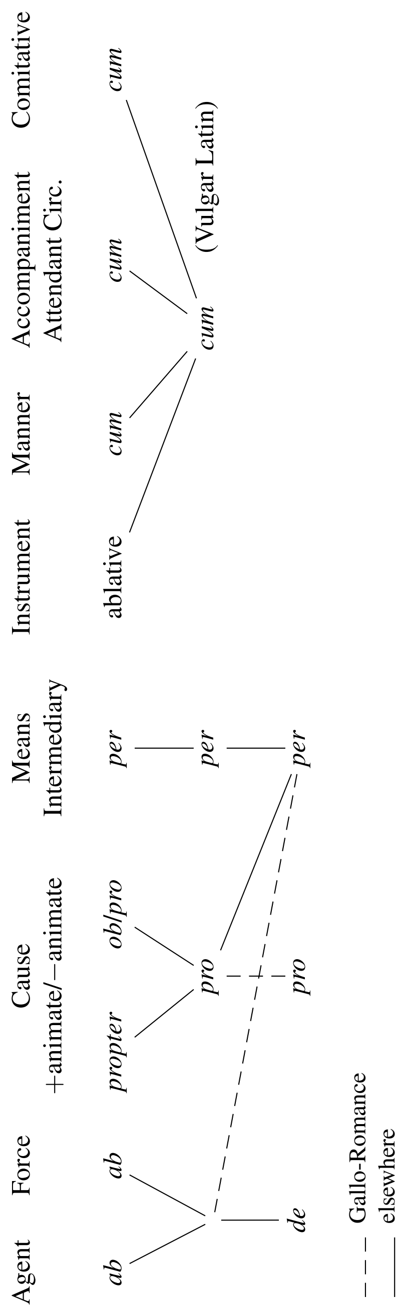


Figure 9. The space of the ablative in Latin and its reflexes in Romance

Circumstances (hence Comitative) and to Means/Instrument. Besides, Instrument should not be viewed as sharply separated from Cause; and similarly, there are contacts between Means and Force, and Intermediary and Agent, as we have seen in the sections devoted to each role.

In Vulgar Latin, the group of semantic roles coded through Comitative markers extends to include Instrument: the ablative case that constituted a link between Comitative-like and causal semantic roles disappeared later, and the two groups of roles are divided in a more clear-cut manner as a result. Most prepositions that coded Cause disappeared, and *pro* extended its use, thus bringing about the merger of Cause, Purpose, and Beneficiary. The distinction between Agent and Force disappeared, and the two semantic roles got to be coded in the same way. At a later stage, Means and Intermediary, too, merged with Cause/Purpose/Beneficiary everywhere except for Gallo-Romance, in which Intermediary expressions had extended to Agent and Force. All semantic roles in Figure 9, except those at the two extremes, can be coded through the plain ablative or a PP. At the extremes we find semantic roles typical of human participants: Comitative and Agent. For these semantic roles, prepositions are virtually obligatory; the plain ablative only occurs occasionally, limited to nouns that denote military forces, and are low on the animacy scale. Apparently human participants require extra coding, as also shown by coding of Intermediary, as opposed to Means: while the latter semantic role can be coded through the plain ablative, the former always requires the preposition *per* with the accusative. In the case of Cause, only inanimate nouns can occur in the plain ablative, while animate nouns take *propter* with the accusative in Classical Latin.

Note that within Cause expressions the semantic space of the ablative interacts with the space where we find semantic roles typically expressed by the dative, because the preposition *pro* can stand for roles that can be coded through either case. It can also be noted in passing that the semantic space of the dative includes a smaller number of semantic roles, possibly because most of them are roles typical of human participants: again, with human participants coding means apparently do not allow so high a degree of polysemy as with inanimate participants. The semantic space of the dative is consequently less complex than that of the ablative, and it comprises a number of semantic roles typical of arguments, rather than adverbials. In Figure 10 I try to sketch the space of the dative, including the semantic role Recipient,

which I did not discuss in this chapter. This schema is necessarily a generalization, because it leaves out some other semantic roles, such as Possessor, that are discussed elsewhere (Baldi and Nuti, this work, vol. 3). Note that the semantic roles typically taken by adverbials tend to be coded by prepositional phrases, and that the plain dative is virtually limited to arguments. (The few occurrences of *ad* with verbs of giving and communication can be analyzed as containing Direction adverbials, rather than third arguments with the function Recipient/Addressee).

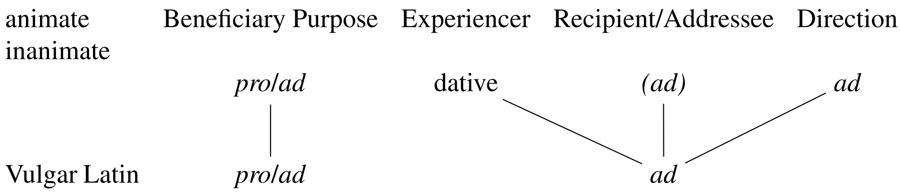


Figure 10. The space of the dative

In Figure 11 I give a semantic map of the roles of adverbials (plus Recipient), based on the findings from the Latin data. Semantic roles typically taken by animate (mostly human) participants are **boldfaced**. The hatched ovals correspond to the four spatial semantic roles, *SOURCE*, *Path*, *Location*, and *Direction*. They all have areas of overlap, except for Source and Direction. Overlap allows for different types of coding of the abstract semantic roles that are mapped onto the spatial plane. The figure must be seen as tridimensional, allowing more contacts between semantic roles that are not on the same line (notably between Cause, Reason, and Beneficiary). This is indicated by the lines that unite semantic roles which can be encoded in the same way: in other words, the lines indicate possible syncretism among semantic roles. Semantic roles that are close to each other or are connected with lines can syncretize, while those which do not display syncretism among each other are the ones that are on the edges of each field.

It should be noted that these are roles which are typically taken by human participants, namely, Agent, which is located in the area of the spatial semantic role Source; Comitative, in the area of Location; and Beneficiary (with the neighboring roles Experiencer and Recipient), in the area of Direction. They display the maximum distictive encoding: while some other roles

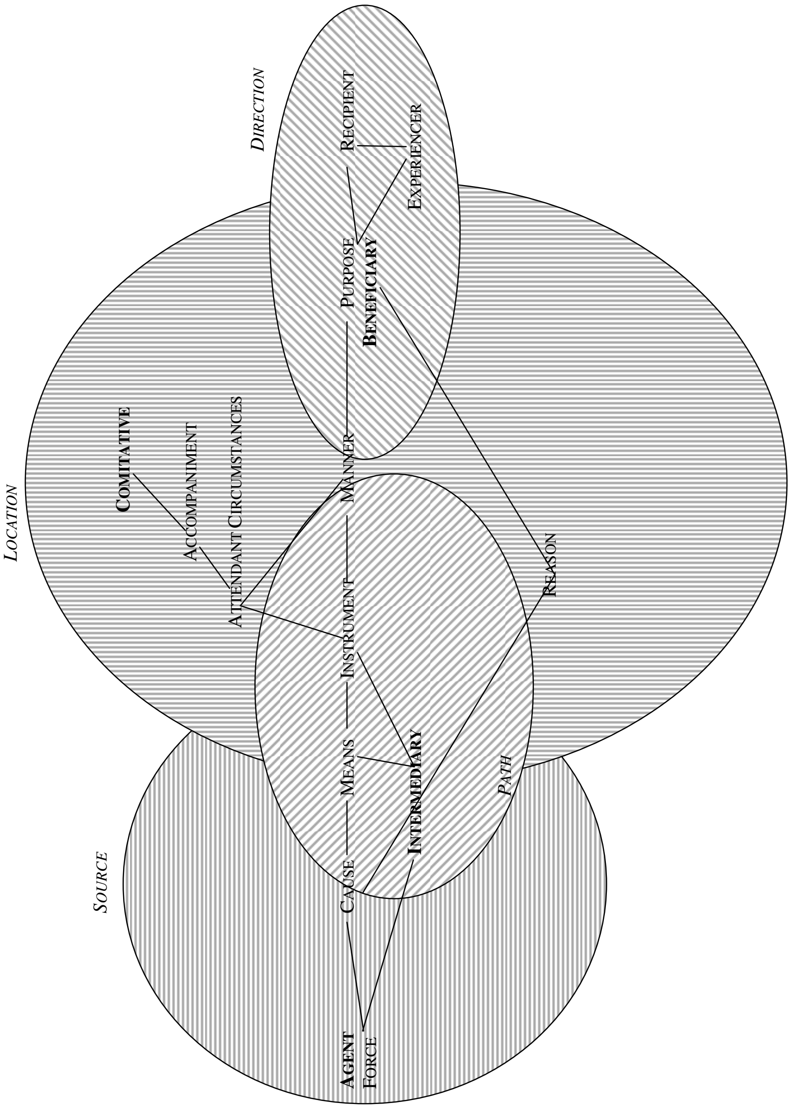


Figure 11. Semantic map of the roles of adverbials

located in different areas may be encoded in the same way (e.g., Attendant Circumstances, Cause, and Reason), Agent, Comitative, and Beneficiary are always kept distinct. This is due to the fact that human participants can take a great variety of semantic roles, and, since they may or may not act voluntarily, their precise role in an event is more relevant than the role of inanimate entities.

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Davide Ricca

Adverbs

1. Heterogeneity of adverbs: A basically tripartite category

As is well known, grammatical tradition has always placed a host of diverse items under the label "adverb", thus building up a very heterogeneous set, formally as well as functionally. Latin grammar, both ancient and modern, is no exception: a comprehensive discussion is found in Pinkster (1972: 35–61). A general classification and delimitation of the topic therefore seems necessary.

Despite the well-founded objections put forward by Pinkster, it will still be assumed as a starting point that an adverb can be primarily defined as a nonnominal modifier (cf. Hengeveld 1992: 58). To be sure, this definition must be understood in a prototypical sense, since it cannot accomodate at least two relevant subclasses usually included within adverbs, namely: (i) focalizers (*etiam* 'also', *modo* 'only', *quidem* 'really/exactly', and the like), which often "modify" nominal constituents – indeed, they can have scope over every kind of constituent; and (ii) textual connectors (*tamen* 'nevertheless', *ideo, propterea* 'therefore'), which functionally border on coordinating conjunctions and can hardly be viewed as carrying a modifier function. In this chapter we do not deal extensively with these two subclasses, which are taken into account elsewhere under the label "particles" (see Rosén, this work, vol. 1). Some sequential connectors like *postremo*, however, are mentioned later as an instance of polyfunctionality between adverbial and connective uses (see Section 4.7 below).

Coming back to "core" adverbs as nonnominal modifiers, the definition we have just given has itself a disjunctive character, since it covers at least three different entities that adverbs can act on: (i) verbs, (ii) whole sentences, (iii) adjectives (and other adverbs). In the functional perspective we adopt, reflecting approaches like Quirk et al. (1985: 438–441) or Dik et al. (1990),

we basically keep this intuitive tripartition, with some qualifications. We distinguish among:

(i) predicate adverbs: these include adverbs with argument status (which are properly not modifiers at all) and those modifiers which, although optional, specify additional properties of the predication (for adverbs, typically manner/speed, but also intensity, some aspectual properties, etc.) and therefore contribute to its identification

(ii) sentence adverbs: these modifiers do not change the nature of the state of affairs identified by the predication but rather locate it in time or space, quantify over the number of its occurrences, or perform various kinds of subjective evaluations of the truth value or illocutionary force associated with the utterance. All these modifiers have the "inner" predicate adverbs in their scope, but clearly they display a further internally layered structure, to be addressed in Section 4.1 below.

(iii) modifiers of other modifiers (typically, but not exclusively, of adjectives), which act at the phrase level.

Such a threefold characterization may look too heterogeneous for a single part of speech. However, when a language possesses an open class of verbal modifiers distinct from nominal modifiers, items belonging to that class often fulfill functions (ii) and (iii) as well. This is the case for English *-ly* or Romance *-ment(e)* adverbs, among several others. Moreover, in these languages the very same lexeme can often perform all three roles. Compare for instance English *cleverly* in (1a–c):

(1)	a.	*he did not react* ***cleverly***	(predicate modifier)
	b.	***cleverly,*** *he did not react*	(sentence modifier)
	c.	*a* ***cleverly*** *quiet reaction*	(modifier's modifier)

Thus, at least for languages like English, grouping the three functions in (1) within a single lexical category seems justified (see fuller discussion in Ramat and Ricca 1994: 308–315). In Sections 3–5 we try to ascertain to what extent the same polyfunctionality holds for Latin adverbs, focusing especially on sentence modification, which is by far the most complex of the three from the semantic point of view. Traditional Latin grammar has paid very little attention to this issue (as stated for instance in Pinkster 1972: 96). More generally, within this tradition adverbs have been given limited space

overall.[1] A factor which presumably contributed to their assignment to the domain of lexicon rather than grammar was their being “invariable”; that is, lacking inflection.[2] Tellingly, perhaps the aspect of adverbs which has been most thoroughly investigated is the diachrony of their derivational affixes, especially from the point of view of their historic relationship with “lost” case markers of the nominal/adjectival paradigm.

The chapter is organized as follows. In Section 2, the reasons to consider Latin adverbs as an open word class are given, together with an outline of the adverb-forming morphological devices available in Latin and some discussion about their interaction with two other categories on the border between inflection and derivation: gradation and evaluation. Sections 3–5 deal extensively with the polyfunctionality in (1), adding some tentative considerations concerning the related diachronic semantic development. Section 6 discusses the uses of adverbs as autonomous predications. In Section 7, two syntactic properties of the adverb phrase are treated, coordination and argument structure. The latter leads to the consideration of the adverb–preposition continuum, with its diachronic implications in terms of grammaticalization. Finally, Section 8 takes a further diachronic perspective, discussing the grammaticalization path that gave rise to the full renovation of the adverb word class in Romance languages.

1. Things have changed in recent years, however. Many contributions which would be relevant for the contents of this chapter have just appeared, for instance, in Fruyt and Van Laer (2009), but unfortunately they could not be taken into account here.
2. As already noted by Pinkster (1972: 46), the status of “invariability” of adverbs may be challenged by the fact that many of them display morphological markers of gradation, which can well be considered an inflectional category, although not a prototypical one (see, e.g., Dressler 1989: 6). On the interaction between adverbs and grade, see Section 2.3.1. The statement about adverbs lacking inflection should be specified; in fact they lack contextual inflection (in the sense of Booij 1994), i.e., those inflectional markers that map syntactic relations into the word (typically, but not exclusively, all kinds of agreement morphology).

2. Latin adverbs as a major word class

2.1 General and typological considerations

In Section 1 it has been taken for granted that adverbs in Latin belong to a major word class on their own, no different from the case in English or Romance languages. Typologically, this is not an obvious fact: adverbs as lexical items neatly distinguishable from adjectives are far from universal.[3] Still less common is the existence of a separate open word class of adverbs that is freely extendable by productive language-internal means, chiefly by derivation. This is doubtful, for instance, for languages as familiar as Modern German or Dutch (at least concerning manner adverbs).

Even with respect to Latin, the status of adverbs as an autonomous open word class is not unanimously accepted. Pinkster (1972: 63–70) discusses and rejects – convincingly, in my view – the hypothesis of treating productively formed deadjectival adverbs like *fortiter* 'strongly, courageously' or denominals like *centuriatim* 'by centuries' as part of the inflectional paradigms of the adjective or noun. The main argument for the putative inflectional status of *-iter* in *fortiter* is the parallel behavior *uir fortis* 'courageous man' vs. *fortiter agere* 'act courageously': *fortiter* could be seen as belonging to the same paradigm as *fortis*, with the marker *-iter* carrying no semantic information but merely reflecting its syntactic role of verb modifier.[4] As for denominal adverbs, a form like *centuriatim* might be interpreted in this perspective as a sort of special case form of *centuria*, with distributive meaning.

3. Indeed, even adjectives do not constitute a universal word class. In some languages only one major contrast between word classes may be identified, namely noun vs. verb, and "adjectival" (i.e., property) concepts are split between the two (see Dixon 1977, Bhat 1994, Wetzer 1996, Rijkhoff 2000). In other languages, however, a distinct major word class of modifiers can be identified without any further clear-cut contrast between "adjective" and "adverb". On the hierarchical ordering of part of speech distinctions, see Hengeveld (1992: 47–72).

4. For this "inflectional view" of Latin adverbs, see for instance Bergsland (1940: 53), Bos (1967: 117–122) and the other references given in Pinkster (1972: 63–70). Note also that similar claims are not unknown for English *-ly* adverbs as well (cf. Haspelmath 1996: 49–50).

However, Pinkster (1972: 69) correctly remarks that *-iter* or *-ātim* as case forms would display morphological properties highly divergent from all the rest of Latin inflectional morphology, as they do not allow for cooccurrence (or cumulative exponence) with Number and/or Gender.

Syntactically, a serious difficulty for interpreting deadjectival *-iter* as a contextually conditioned mark of verb modification is the already mentioned polyfunctionality of adverbs, which can also modify adjectives or full sentences. Conversely, the widespread use of predicative adjectives (the type *libens facere* 'do willingly', cf. Plaut. *Cas*. 869, beside *libenter facere*; see Hofmann & Szantyr 1965: 172, Pinkster 1995: 183-185) likewise speaks against the idea of considering the adverb as the particular adjectival word-form syntactically required in all instances of predicate modification. A still stronger syntactic counterargument can be put forward for denominal adverbs (Pinkster 1972: 68): if forms like *centuriatim* were nominal case forms – synchronically of course[5] – it should be possible to modify them with adjectives, determiners and the like, which is definitely not the case.

Moreover, Latin adverbial formations display semantic developments and lexical gaps typical of word-formation processes but highly unusual in inflection. Cf. *sane* 'indeed' vs. *sanus* 'healthy', *aegre* 'hardly, scarcely' vs. *aeger* 'ill', *longe* usually 'far' vs. *longus* usually 'long', etc. Among the lexical gaps – to be evaluated cautiously due to the limited extent of the extant corpus – some appear to be quite idiosyncratic (like the absence of **tristiter*, **mititer*, or **ruditer*), but at least one is systematic: as in Romance languages or English, adverbs are not usually derived from adjectives expressing physical properties, except when they are used metaphorically (Löfstedt 1967: 80–81).

Finally, the very existence of several different adverb-forming suffixes (see Section 2.2), none of which can attain the level of generality typical of inflectional processes, speaks in favor of assigning the related processes to word formation. From this point of view, morphologically complex Latin adverbs behave "more derivationally" than their counterparts in Western Romance languages, where a single suffix *-ment(e)* does the whole job.

5. The uncontroversial fact that many adverbs and also the productive suffixes *-ē* and *-ātim* are etymologically related to nominal case forms is obviously not relevant here, although it may have influenced the supporters of the inflectional view.

Diachronically, the creation of an independent word class of adverbs can be viewed as an overall Latin innovation with respect to the Indo-European stage, as no common derivational device can be reconstructed for the protolanguage. It appears that several Indo-European subfamilies have independently introduced adverbs within their open word class inventory, often by picking up resources from the rich – and sometimes redundant – array of inherited inflectional markers. See Cuzzolin, Putzu, and Ramat (2006: 5–15) and references therein.

2.2 The derivational suffixes

2.2.1 Deadjectival manner adverbs: -ē *and* -iter

By far the most important Latin adverbial suffixes are *-ē* and *-(i)ter.* They both productively form deadjectival adverbs, chiefly but not exclusively with manner semantics and taking qualifying adjectives as bases. As a first approximation they display a typologically interesting division of labor: *-ē* attaches to adjectives of the first class (historically, *-o-/-a-* stems: *stulte* 'stupidly'), and *-(i)ter* to those of the second class (historically, *-i-* and consonantal stems: *breuiter* 'briefly', *atrociter* 'atrociously').

Such a selection of competing derivational morphemes depending on inflectional class is worth noticing, as it is surely not commonplace in derivational morphology. However, it is at least partially to be ascribed to artificial pressure from the conscious literary norm. It is well known that the limitation of *-(i)ter* to class 2 adjectives substantially holds for the Classical period only (with notorious exceptions, e.g., *humaniter* widely used by Cicero in his early works, *largiter* among others by Caesar, *nauiter* 'industriously' even ousting its "regular" competitor *naue*, etc.), while *-(i)ter* formations from *-o-/-a-* adjectives are relatively abundant both in Early and Late Latin, the latter not necessarily on archaizing patterns (see Rosén 1999: 56–61 and references therein). The complementary restriction on *-ē* seems on the contrary to hold throughout Latin history: diachronically, it depends on the fact that *-ē* comes from an ablative case ending (originally *-ēd*, Leumann 1977: 411), which applied to some inflectional classes only.

Since we deal here chiefly with syntax, we will not enter into morphological details: suffice it to mention that the allomorph *-(t)er* is always found with

present participles/adjectives which display *-nt-* stems (*sapienter* ‘wisely’, *prudenter* ‘prudently’) and also in *audacter* ‘audaciously’. The same *-(t)er* extends to the series of *-lentus* adjectives (*uiolenter*, *truculenter*, etc.), despite their belonging to class 1, most plausibly due to the analogical pressure of the far more numerous *-ens* adjectives (Löfstedt 1967: 91).

Adverbs in *-ē/-iter* can be freely formed from already derived adjectival bases, for instance *-ōsus* → *-ōsē*, *-ārius* → *-āriē*, and *-ālis* → *-āliter*, *-bilis* → *-biliter.* For their interaction with the category of gradation, see Section 2.3.1.

2.2.2 Adverbs in -im*,* -tim*,* -ātim

Latin adverbs in *-im, -tim*, and *-ātim* do not constitute a uniform group, although they are obviously etymologically related. The diachronic starting point of *-im* adverbs (which have been extensively studied, cf. Bergsland 1940, Schaffner-Rimann 1958, Cupaiuolo 1967: 47–58, Leumann 1977: 501–502) is usually found in accusative case forms from nominal stems in *-ti/-si*. Some are still synchronically fully retrievable, like *partim* ‘partly’ from *pars* ‘part’ (whose Classical Latin accusative form is *partem*); many can be related to unattested but reconstructable Proto-Indo-European deverbal nouns in *-ti/-si,* like *raptim* ‘hastily’, *cursim* ‘at a run’, and so on. The formation of this latter group is thus quite parallel to the first and second supine in *-um* and *-ū*, originally accusative and ablative forms of deverbal nouns in *-tu/-su*; but this is not a sufficient reason to assign these *-tim/-sim* forms to verbal inflection, as Bergsland (1940) does. Synchronically, they can still be connected to verbal bases, but the relationship is derivational in nature, as it lacks the level of generality typical of forms belonging to an inflectional paradigm. Many of them can also be analyzed as deadjectival *-im* adverbs, starting from participial adjectives, as *cautim* ‘cautiously’ (Acc. *trag.* 77, *trag.* 541; Ter. *Haut.* 870), equally traceable to *cauēre* ‘be cautious’ and *cautus* ‘cautious’.

Adverbs related to denominal *-āre* verbs then underwent a process of reanalysis: forms like *nominatim* ‘by name’ could also be interpreted as derived from the noun, which gave rise to the new suffix *-ātim*.

Both suffixes appear to be productive throughout the history of Latin: deverbal *-im* with formations like *caesim* ‘with a hewing blow’, *pressim* ‘with pressure’, and *-ātim* both as denominal (*centuriatim* ‘by centuries’) and dead-

jectival (*singulatim* 'individually'), although it is difficult to evaluate the weight of literary and partly artificial choices. Both survive even into Medieval Latin.[6] Semantically, a distributive meaning is often present in denominal *-ātim* (*uicatim* 'district by district', Cic. *Att.* 4,3,2), but others items convey purely a manner meaning (*gregatim* 'in herds', *summatim* 'summarily'). Several doublets with adverbs in *-ē/-iter* were simplified in the process of the standardization of Classical Latin, to spread again in later periods (Rosén 1999: 56–58).

2.2.3 Adverbs in -itus

The productivity of adverbs in *-itus* is very limited. Diachronically, the suffix *-tus* (IE *-*tos*) has precise equivalents in Greek (cf. ἐν-τός 'inside') and Sanskrit (*mukha-taḥ* 'from/in the mouth') and in this form it appears in *intus*, *subtus* (Cupaiuolo 1967: 58–59). In Latin formations, however, the suffix usually has the form *-itus*; it is both deadjectival (*antiquitus*, *publicitus*) and denominal (*funditus*, *radicitus, caelitus*), and sporadic new formations are attested in Late and even Medieval Latin (Stotz 2000: 377–378 cites *perennitus* 'perennially', *somnitus* 'in sleep'). The original ablative semantics has often been extended to a more general locative, and often also to metaphorical meanings (which prevail in the Classical Latin uses of forms like *radicitus* 'from the roots' or *funditus* 'completely').

2.2.4 Denumeral adverbs in -iē(n)s

The series of denumeral adverbs in *-iēs,* earlier *-iēns,* appears to be fully productively derived from numeral bases from *quinque* onward. These formations are treated together with other numerals in de la Villa (this vol.), although they are also mentioned in Section 4.2.2 below. Outside numerals proper, the formation extends to a few other quantifiers, giving *totiens* 'so many times', *quotiens* 'how many times?' and *aliquotiens* 'a few times'. At

6. Stotz (2000: 375–376) mentions new formations like *adunatim* 'together', *beatim* 'with a blessing' for deverbal *-im*, and *clausulatim* 'sentence for sentence', *mensuatim* 'every month' for denominal *-ātim*. As the main denominal strategy for building adverbs, *-ātim* appears to apply also to some Greek borrowings like *antiphonatim*, *antonomasiatim*.

least Early Latin also had *compluriens* ‘several times’ (Plaut. *Persa* 534, Cato *or*. 225). *Paucie(n)s* ‘few times’ (cf. Gk. ὀλιγάκις) is very scantily attested – only in Early Latin fragments reported by grammarians (Titin. *com.* 40, 41, Cael. *hist*. 43). While no instances of **multie(n)s* (cf. Gk. πολλάκις) are recorded at all in *ThLL*, the hybrid formation *multoties* occurs from the fourth century onward. Stotz (2000: 377) interestingly reports some new formations in Late Medieval Latin from other quantifiers (*nonnullies*) and even adjectives semantically related to frequency (*finities/infinities*).

2.2.5 Deadjectival adverbs in -ō

It is doubtful whether deadjectival adverbs in *-ō* are the output of a genuinely productive word formation rule, or whether they are all to be accounted for by idiosyncratic nonderivational processes like those in Section 2.2.6. Several doublets with *-ē* formations are attested since pre-Classical times, although the process of standardization of Classical Latin often led to the privileging of one of the two forms: for instance, the *-ō* form prevailed in cases like *crebro* ‘often’ and *falso* ‘wrongly, falsely’, with *crebre* and *false* becoming quite marginal in the extant corpus.[7] Generally, both forms survived well only with strong semantic specialization. For instance, *uere* kept meaning ‘justly’ as an antonym of *falso* ‘falsely, wrongly’, while *uero* evolved toward speaker-oriented and connective functions (Kroon 1995: 286–287). Conversely, *certo* was limited to the predicate modifying function, chiefly in the collocation *certo scio* (see *ThLL* s.v.), while *certe* developed to a modal adverb (Section 4.4).

We cannot follow individual histories here, and we can just point to two semantically related fields which show a significant preference for *-ō* formations: (i) adverbs derived from ordinal numbers (*primo*, *tertio*, etc.) used both for reference to a series of events and for the sequential structuring of the discourse (but in both functions also the conversion-like items, *primum*, etc., are available); and (ii) adverbs derived from time adjectives, denoting frequency/duration (*aeterno, continuo, cotidiano*, *raro*, *subito*, etc.) or location in time (*crastino* [Gell. 2,29,9], *matutino*, *sero*). In some instances, these derivations appear not even to be blocked by existing synonymous underived

7. For a normative statement, cf. Caper *gramm*. 7,109,3: *crebro, non crebre*.

adverbs (like *cotidie*, *cras*, *mane*). Unfortunately, both lists also illustrate a serious difficulty in analyzing *-ō* adverbs. Since, unlike *-ē*, *-ō* did not disappear at all from the adjectival paradigm, the items above could well have originated from deletion of the head of common noun phrase collocations like *primo, tertio tempore/loco, matutino tempore/ortu*, etc. (all attested alongside adverbial use). In that case, these *-ō* adverbs would not be the output of any productive adverbializing word formation rule.

Surely to be kept apart are the instances of denominal *-ō* adverbs, like *initio* ‘initially’, *uulgo* ‘in mass; commonly’, which are just nouns in the ablative case. In many instances it is quite legitimate to consider them distinct lexemes, even when the corresponding nouns are in use (like *uulgus* or *initium*) due to the semantic specialization they underwent, although the boundary is necessarily fuzzy. It would hardly be feasible, however, to treat them as the result of a derivational process: they cannot be separated from the other instances of frozen case forms that will be briefly mentioned below.[8]

2.2.6 Frozen case forms and conversions

Many Latin adverbs in common use became separate lexemes coming from “frozen” nominal case forms. Different factors can yield lexicalization: the noun may have ceased to be in use as such (*mane, frustra, palam, sponte*); the relevant ending may have been become phonologically distinct from the regular one occurring in the inflectional paradigm (as in *noctu*); or even the whole inflectional category may have disappeared (this is the case of ancient locatives like *heri*, *uesperi*). A relevant contribution to the lexical stock of adverbs is also provided by univerbations from ancient phrases, both nominal (cf. *hodie*, *postridie*) and verbal (*scilicet*, *dumtaxat*, *forsitan*, etc.)

Investigation in this field has been a favorite topic of historical linguistics, since it offers much data for comparison between branches of Indo-European and provides important information on older stages of the inflectional system in the transition from Proto-Indo-European to Latin. For the same reason, however, its results are of little relevance here, as the processes in question are

8. Further instances of nouns in the ablative (from all declensions) with quasi-adverbial properties are mentioned in Section 7.1.2. (see also Hofmann & Szantyr 1965: 117).

inherently nonproductive.[9] We will not deal with them any further, referring to the specialized literature in the field (cf. Brugmann 1909–1911: 667–758, Beekes 1995: 218–223, Baldi 2002: 350–351, also Fruyt, this work, vol. 4).

A somewhat different issue is given by adverbs like *facilĕ* 'easily', *dulcĕ* 'sweetly', *recens* 'recently', *primum* 'for the first time', formally identical with the neuter singular of the adjective. Since the latter may be taken as the unmarked form in the paradigm, these items could be analyzed as conversions (and consequently as the output of a morphological rule) rather than frozen forms. A good argument in favor is that the conversion rule is required, and fully productive, with comparatives (see Section 2.3.1). In the positive grade, however, it is unclear whether the limited number of attestations suffice to justify this analysis. One wonders whether the prevalence of formal registers in the extant Latin corpus may be responsible for this limitation, when one considers the fortune of the type in many Romance varieties (cf. It. *lavorano duro* 'they work hard' beside *lavorano duramente*), especially nonstandard ones.[10]

2.3 Adverbs and other categories at the inflection–derivation border

2.3.1 Adverbs and gradation

The interaction of the adverbial formations with the category of gradation is typologically interesting, since both are borderline processes between inflection and derivation, even if they tend to be placed on opposite sides of the border (but see Section 2.1 above; for some crosslinguistic comparisons,

9. It is important to stress – since the distinction is often overlooked in historically oriented works – that such "frozen case forms" are a totally different matter from the case of the suffixes *-ē* and *-(āt)im* discussed above. These latter suffixes left the inflectional paradigm but survived in the grammar as productive derivational devices: they are thus instances of transition from inflection to derivation, not of idiosyncratic lexicalization.

10. For the type in Romance and its possible links with the Latin forms, see the thorough discussion in Hummel (2000: 449–470). Hummel denies that the greater diffusion of the conversion-like type in poetry with respect to prose is necessarily at odds with its possible interpretation as popular use as well.

cf. Ricca 1998: 460–463). In Latin, these two categories interact in a complex way. Functionally, we may say that manner adverbs (and some other adverbs expressing gradable notions related to space and time) can inflect by grade; however, there is a clear mismatch between form and function. From a formal point of view, there is no superlative of the adverb, but rather an adverbial form taking the superlative adjective as its base. This is most evident in the adverbs derived from class 2 adjectives: in *fortissime* the adverbial suffix *-ē* is selected by the class 1 superlative stem *fortissim-*. Thus, if adverbs are derivational formations, we have a counterexample to Greenberg's universal 28, which states that inflection is peripheral with respect to derivation (Greenberg 1963 [1966: 95]).[11] The difficulty would obviously disappear if adverbs as a whole were considered inflected forms, contrary to our argument in Section 2.1.

A different approach is taken by, e.g., Pinkster (1972: 70), who considers *-issim-* as derivational as well. However, this option is harder to take than for Romance *-i(s)sim-,* which has only elative meaning. The Latin superlative, on the contrary, can influence the external syntax of the adjective/adverb, enabling it to govern an argument introduced by *ex*, as in (2):

(2) Plin. *nat.* 20,96: *marina brassica* ***uehementissime ex omnibus*** *aluum ciet*
'the sea cabbage moves the bowels most energetically of all (varieties)'

For the comparative/elative, the situation is different but no less complicated. Again, formally there is no comparative of the adverb, which should yield forms like **fortiterius*. In this case, however, there is no adverb of the comparative either: if it were so, contrary to the superlative, the adjectival base would belong to the second class and we should expect the *-iter* suffix for all deadjectival adverbs, i.e. both **fortioriter* and **lentioriter*). In the comparative grade Latin follows a third procedure. Adverbs are not derivations proper, but conversions from the unmarked form of the adjectival com-

11. The violation of Greenberg's universal becomes less problematic following Booij's approach, which distinguishes between inherent and contextual inflection and states that "non-contextual inflection may feed word-formation" (Booij 1994: 45).

parative paradigm (the neuter singular nominative–accusative): *fortius*, both 'stronger' and 'more strongly'. As was mentioned in Section 2.2.6, in the positive grade the same procedure is not unknown, but is surely far from general.

Summing up, the paradigmatic connection between the three grades in the adverbial paradigm is very weak indeed, and basically rests on those few adverbs which cannot be synchronically related to any adjective but inflect for grade, such as *saepe*, *saepius*, *saepissime* 'often, more often, most often'.

2.3.2 Adverbs and diminutives

Another morphological category which is borderline between inflection and derivation and interacts with adverbs in an interesting way is diminutivization. Diminutives, being mainly associated with informal registers, are very erratically attested in the Latin corpus, but they occur widely in comedy, informal texts such as Cicero's letters, and as a stylistic choice by some authors, Apuleius above all. Cf. Hofmann & Szantyr (1965: 772–777) and Fruyt (1989). They are both denominal and deadjectival, but here we are only concerned with the latter.

Contrary to the Romance state of affairs, in Latin adverbs in *-ē* can be derived from adjectives modified by diminutive suffixes. Although the instances are not very numerous for the reasons given above, they can be found in all kinds of texts which make widespread use of diminutive adjectives. A couple of examples from two distant periods of Latin history are given in (3)–(4):

(3) Plaut. *Rud.* 266: *ilico hinc imus, haud* ***longule*** *ex hoc loco*
'we are just coming from close to here, not very far from this place'[12]

(4) Aug. *conf.* 3,7,12: *et quasi* ***acutule*** *mouebar ut suffragarer stultis deceptoribus*
'and I was, as it were, in some subtle way persuaded to approve those foolish deceivers'

12. This instance interestingly shows that semantically the diminutive may act beyond the word it attaches to. In (3), the attenuation concerns *haud longe*, not *longe* alone. On this example cf. Fruyt (1989: 135).

Syntactically, complications arise from the fact that in Latin diminutives can also co-occur with the comparative grade of adjectives, in both its elative and its "true" comparative sense. When the comparative is employed as elative, there is a strong semantic overlap between the two morphemes involved. But this is not the case with "true" comparatives. Here, each suffix keeps its distinct meaning, as in (5):

(5) Plin. *nat.* 26,30: *folia sunt* ***maiuscula*** *quam hederae V aut VII*
'the leaves, five or seven in number, are *rather larger* than those of ivy'

This kind of formation is again typologically problematic with respect to the inflection–derivation ordering. While the elative may perhaps be assigned to derivation, this is much less feasible for the comparative proper, which clearly interacts with syntax. Then, if Latin diminutives belong to derivation – as definitely seems to be the case – in sentences like (5) syntax has to "look" inside the word, beyond a derivational suffix, to detect the comparative marker which licenses the particular argumental structure, with *quam* introducing the standard of comparison.

Not unexpectedly, such diminutivized comparative adjectives can further be adverbialized, and again in both elative and "true comparative" senses. See (6) and (7) respectively:

(6) Gell. 7,16,2: *uerbum 'deprecor'* ***doctiuscule*** *positum in Catulli carmine*
'the verb "deprecor" used in a rather learned way in a poem by Catullus'

(7) Cic. *epist.* 16,5,1: *uolebam ad te Marionem remittere quem, cum* ***meliuscule*** *tibi esset, ad me mitteres*
'I wanted to send you Mario, whom you could send back to me when you feel a little better'

Regarding the assumption – often taken for granted – that words are impermeable to syntax, a case like (7) is still more problematic than (5), because the inflectional information ("comparative") is now internal with respect to two derivational processes, namely the diminutive and the adverbializing suffix.

2.3.3 Adverbs and evaluative prefixes

Latin evaluative morphology also includes three productive evaluative prefixes: *per-* and *prae-,* whose meaning is not far from the elative *-issimus*, and the downgrading *sub-* 'rather' (see now Cuzzolin 2005). All three are well attested in combination with deadjectival adverbs, as in *perceleriter* 'most rapidly' (Cic. *rep.* 2,12), *praepropere* 'with great haste' (Liv. 2,45,3), *subadroganter* (Cic. *ac.* 2,114) 'somewhat presumptuously', etc. It is undecidable which ordering of the two derivations is to be preferred. Due to the limitation of the extant corpus, the frequent absence of attestations of the corresponding prefixed adjective (*subadrogans* and the like) is not sufficient to prove that the prefix is attached to the adverb. On the other hand, the possibility that the prefixes indeed take the deadjectival adverb as base cannot be ruled out, since at least *per-* also attaches to nonderived adverbs (where no alternative analysis is available), as in *persaepe* 'very often' (Cic. *inv.* 1,71), *peruesperi* 'late in the evening' (Cic. *epist.* 9,2,1).

3. Predicate adverbs

The main distinction within predicate adverbs is between arguments, namely indispensable modifiers belonging to the nuclear predication, and circumstantial or satellite constituents. Although the borders may be fuzzy, this distinction – recognized in every theoretical framework – is fundamentally workable and, with due caution, may also be applied to a dead language.[13] Predicate adverbs mostly qualify for nonnuclear rather than argument status, but in several instances they have to be considered arguments. The two roles are illustrated separately in Sections 3.1 and 3.2.

Being an argument or not is rarely a matter of the given adverb alone, since it crucially depends on the semantics of the modified predicate. Nor does it yield clearcut consequences for the syntactic position of the adverb

13. The most general application of the distinction between arguments and circumstantials to Latin is found in Happ (1976: 179–312). See also Heberlein (1986), Lehmann (2002). For an illustration of the (limited) applicability of the well-known "do so" test to Latin *facere* as a substitute for the nuclear predication, cf. Pinkster (1995: 14–16).

with respect to the verb and the other main constituents of the sentence. Any satisfactory treatment of this topic would in any case go far beyond the limits of the present chapter. It is well known that the interaction of different discourse factors conditioning the basically "free" word order in Latin gives rise to a very complex picture (cf. Marouzeau 1949, Panhuis 1982, Pinkster 1995: 211–243, Bolkestein 2002, Bauer this work, vol. 1), not to mention the variation depending on textual type and even idiolectal preferences. More specifically, issues of adverb position seem to have been less explored than those concerning other constituents (see Ros 2005), and the cautious evaluation by Pinkster (1972: 108), echoing the equally cautious Marouzeau (1949: 33), must probably still be subscribed to today.

3.1 Predicate adverbs with non-argumental function

3.1.1 Manner adverbs

By far the most common non-argumental function of predicate adverbs is the manner function (we also include speed, kept distinct in Dik et al. 1990: 31). Examples are of course innumerable and occur with high textual frequency, at least in prose.[14] As a single illustration, in (8) a whole series of coordinated adverbs modifies two among the most general predicates, *dicere* and *agere*:

(8) Cic. *Att.* 5,10,3: *ita multa uel* ***iracunde*** *uel* ***insolenter*** *uel in omni genere* ***stulte***, ***insulse***, ***adroganter*** *et dicuntur et aguntur cottidie*
'thus many things are both said and done every day angrily or insolently, or anyway stupidly, foolishly, arrogantly'

As noted above, very little can be said in general terms about the syntactic position of manner adverbs, even in short declarative sentences. At least within Classical prose, where the verb-final position in the sentence is statistically predominant (above all in Caesar, cf. Panhuis 1982: 117–149), the unmarked position for manner adverbs is probably between the subject –

14. For a discussion of the disfavoring (not without exceptions!) of adverbs in poetry, especially the "heavier" ones in *-iter*, cf. Håkanson (1986).

when expressed at all – and the verb. In two-place predicates, they may either precede or follow the second argument (Pinkster 1995: 236), as shown in (9)–(10):[15]

(9) Caes. *Gall.* 5,20,4: *illi imperata* ***celeriter*** *fecerunt*
'they rapidly executed the orders'

(10) Caes. *Gall.* 3,28,4: *Nostri* ***celeriter*** *arma ceperunt*
'our men speedily took up arms'

However, also within Classical prose, information structure requirements may often shift predicate adverbs to the very beginning of the sentence, as in (11), or to its end, after the verb, as in (12) (from Pinkster 1995: 234), especially when they appear to carry the most relevant information, i.e., they are in focus:

(11) Cic. *Lael.* 98: *omnino est amans sui uirtus;* ***optume*** *enim se ipsa nouit, quamque amabilis sit, intellegit*
'certainly Virtue loves herself; for she knows herself best of anyone else, and realizes how lovable she is'

(12) Cic. *Att.* 1,2,1: *abs te iam diu nihil litterarum: ego de meis ad te rationibus scripsi antea* ***diligenter***
'from you, no letter at all for a long time! As for me, I have written you before about my prospects in a detailed way'

Sometimes these considerations are supported more explicitly by the context. For instance, in (13) the contrastive focus on the adverb patently motivates the ordering *uehementer me agere*, to compare with *me . . . iracunde agere* immediately before:

15. This is not to say that (9) and (10) are fully equivalent from the point of view of information structure. In (9) *imperata* is clearly given information (the orders are found immediately above in the text), while in (10) *arma* is part of the rheme.

(13) Cic. *Phil.* 8,16: *nam quod me tecum iracunde agere dixisti solere, non est ita.* ***Vehementer*** *me agere fateor, iracunde nego*
'regarding what you said, that I am used to arguing angrily with you, it is not so. That I argue vehemently, I admit, but I deny doing so angrily'

Apart from focusing, other relevant textual needs can contribute to shifting the adverb toward the final position in the sentence: for instance, when it serves as a point of departure for some further discourse expansion, as in (14), or when it takes the force of an added remark or afterthought, as in (15). Both examples are taken from Marouzeau (1949: 25–33), where many further instances can be found.

(14) Plin. *epist.* 1,14,10: *diligo quidem adulescentem* ***ardentissime*** *sicut meretur*
'indeed I love this young man [Minicius] very passionately, as he deserves'

(15) Ter. *Hec.* 623–624: *tibi quoque edepol sum iratus, Philumena,* ***grauiter quidem***
'by Pollux, I am angry with you too, Philumena, and seriously indeed'

At any rate, it would be quite a difficult challenge to find any motivation for the following alternation between pre- and post-verbal position of the adverb, given the absolute identity of wording, writer, text type, general discourse organization, and local information structure (both examples are openings of recommendation letters).

(16) Cic. *epist.* 13,23,1: *L. Cossinio, amico et tribuli tuo,* ***ualde familiariter utor****. nam et inter nosmet ipsos uetus usus intercedit, et . . .*
'I am on very familiar terms with your friend and fellow-tribesman, L. Cossinius; for there is a long-standing acquaintance between us, and . . . '

(17) Cic. *epist.* 13,31,1: *C. Flauio, honesto et ornato equite Romano,* ***utor ualde familiariter****; fuit enim generi mei, C. Pisonis, pernecessarius*

'I am on very familiar terms with G. Flauius, an honorable and distinguished Roman knight; for he was a very intimate friend of my son-in-law G. Piso'

Note also that a manner adverb may precede *non* and still be a predicate modifier, since it clearly remains within the semantic scope of the negation. This holds in later texts as well, as can be seen in (19) from *Historia Augusta* (not before the end of IV century CE).

(18) Brut. *Cic. ad Brut.* 11,2: *quod enim nondum senatus censuit nec populus Romanus iussit, id* ***adroganter*** *non praeiudico neque reuoco ad arbitrium meum*
'what the Senate has not yet decreed nor the Roman people ordered, I do not judge arrogantly in advance nor do I claim it as a matter of my personal opinion'

(19) Vopisc. *Prob.* 14, 6: *maxime tamen … in eos uindicatum est, qui praedam* ***fideliter*** *non reddiderunt*
'nevertheless those who did not faithfully give back the booty were severely punished'

Examples like (18)–(19) are not easy to find, however. Much more commonly, *non* immediately precedes the adverb. Under these circumstances, it often has to be interpreted as a constituent negation having scope on the adverb only (obviously so in the very frequent instances of litotes); but in several cases the semantic difference alone looks too slight to rule out the other reading completely, as in (20). Sometimes the interpretation of *non* as a sentence negator is even to be preferred, as in (21).

(20) Caes. *Gall.* 7,48,4: *simul et cursu et spatio pugnae defatigati non* ***facile*** *recentes atque integros sustinebant*
'(the Romans), tired out both by the speedy march and the duration of the battle, did not easily resist fresh and uninjured men'

(21) Apul. *met.* 6,26: *haec quidem inepta et prorsus asinina cogitatio; quis enim uiantium uectorem suum non* ***libenter*** *auferat secum?*
'this was indeed a silly and really asinine line of reasoning; for what traveler would not gladly take his mean of transport with him?'

3.1.2 Quantity/intensification and duration adverbs

A semantically different kind of predicate adverb is given by quantity/intensification adverbs, including *multum, nimis, satis, abunde, parum,* etc. The same items also modify adjectives (see Section 5.1). Some other items which can be subsumed under the same category are duration adverbs,[16] such as *diu* 'for a long time', *paulisper* 'shortly' (to be kept distinct from time-setting adverbs like *hodie*, see Section 4.2.1, and frequency adverbs like *saepe*, see Section 4.2.2). *Semper*, besides being a frequency adverb in the sense of 'always', can also take the duration meaning of 'forever' (cf. its parallelism with *diu* in (29) below). Syntactically, quantity and duration adverbs may be coordinated (the collocation *multum ac diu* is rather common, e.g., Cic. *epist.* 8,5,2, Plin. *epist.* 5,17,4) and, perhaps more interestingly, both types can occur in coordination with manner adverbs, despite the semantic distance. Some instances are given in (22)–(24):

(22) Sall. *Iug.* 108,1: *ibi cum Boccho Numida quidam Aspar nomine* ***multum et familiariter*** *agebat*
'in that place, a Numidian called Aspar was in frequent and familiar relationship with Bocchus'

(23) Cic. *de orat.* 3,144: *cum de duabus primis [partibus orationis] nobis quidem* ***satis, sed***, *ut ipse dicebas,* ***celeriter exigueque*** *dixisses*
'although you had treated the first two parts sufficiently for us, but, as you yourself admitted, rapidly and on a small scale'

(24) Apul. *met.* 4,31: *sic effata et osculis hiantibus filium* ***diu ac pressule*** *sauiata ...*
'after she said so and kissed her son long and intensely with parted lips ...'

16. Duration adverbs are considered sentence adverbs (more precisely, "level 2 satellites") in Dik et al. (1990: 33). However, semantically they seem to be better placed among predicate modifiers, together with intensifiers relative to other dimensions (cf. the near-identity of 'speak a little' and 'speak briefly'); and their syntactic behavior with respect to coordination also points in that direction. At most, they could be considered as acting at both levels, like frequency adverbs (see Section 4.2.2.).

3.1.3 Aspectual adverbs

A third class of adverbs modifying the predicate is related to notions pertaining to aspect: in particular *subito*/*repente* 'suddenly', *paulatim/sensim* 'gradually', 'little by little', *statim* 'immediately'. According to Torrego (2002: 382–385; (26), (27), and (29) are from her work), these adverbs may act both at the predicate and at the sentence level. Good evidence for their being predicate modifiers comes from instances of coordination or parallelism with manner/speed adverbs in (25)–(27) and duration adverbs in (28)–(29):

(25) Caes. *Gall.* 1,52,4: *itaque hostes* ***repente celeriterque*** *procurrerunt*
'and the enemy dashed forward so suddenly and rapidly'

(26) Caes. *civ.* 1,80,1: *tali dum pugnatur modo,* ***lente atque paulatim*** *proceditur*
'fighting in this way, the men advance slowly and tentatively'

(27) Cic. *de orat.* 1,150: *etsi utile est etiam* ***subito*** *saepe dicere, tamen illud utilius, sumpto spatio ad cogitandum,* ***paratius atque accuratius*** *dicere*
'even if it is often also useful to speak on the spot, it is still more useful to speak in a better prepared and more accurate way, after having taken time to ponder'

(28) Cels. 7,6,2: *Omnia uero ista et ex paruulo incipiunt et* ***diu paulatimque*** *increscunt*
'now all the above (tumors) start from a very small beginning and grow gradually and for a long time'

(29) Cic. *Tusc.* 1,18: *alii [animum]* ***statim*** *dissipari, alii* ***diu*** *permanere, alii* ***semper***
'some hold that the soul is at once dispersed in space, others that it survives a long time, others that it survives forever'

For an instance in which an aspectual adverb acts at a higher level, see (53) in Section 4.2.1.

3.2 Predicate adverbs with argumental function

3.2.1 Direction (and location) adverbs

Probably the most typical class of adverbs fulfilling an argument function is given by direction adverbs, either deictic/anaphoric (*huc*, *istuc*, *illuc*, *eo*) or nondeictic (*intro, foras, infra, procul*, etc.). They are nearly exclusively arguments, either of two-place (Plaut. *Curc.* 702: *accede huc, leno* 'come here, pimp') or three-place predicates (Plaut. *Amph.* 854: *duc hos intro* 'take these people inside'). Their argument status may perhaps be put in doubt when they occur together with a Recipient, like *huc* in (30):

(30) Plaut. *Pseud.* 1208: *illam epistulam ipsus uerus Harpax* ***huc ad me*** *attulit*
'the real Harpax in person brought that letter here to me'

In the above example it is questionable whether *huc* could be considered the head of a single constituent *huc ad me*, in which case it would obviously be an argument.[17] If the adverb and the prepositional phrase are seen – more plausibly – as two separate constituents, one of them seems indispensable (when not anaphorically recoverable), but not both; and it is difficult to decide which of the two should be preferred as argument, if one does not like to allow for four-place predicates in such cases.

Unlike direction adverbs, those expressing location are usually not arguments, but rather sentence modifiers with setting function (see Section 4.2.1). However, with some verbs like *habitare* they are arguments,[18] as *hic* in (31):

(31) Plaut. *Capt.* 4: *senex qui* ***hic*** *habitat*
'the old man who lives here'

17. Treating *huc ad me* as a single constituent is much more plausible in cases like *fugito huc ad me* 'rush here to me' (Plaut. *Truc.* 880), where the adverb and the prepositional phrase share the same semantics of direction. Similar instances of nested sequences, involving two adverbs, are given in examples (32)–(35).

18. Pinkster (1972: 82) remarks that even a predicate like *habitare* does not necessarily select a location expression as its second argument: this can also be a manner adverb, as in *habitare laxe et magnifice uoluit* 'he wanted to live free of restrictions and sumptuously' (Cic. *dom.* 115).

Direction and location adverbs share a peculiar syntactic feature in their capability to occur in nested structures like those in (32)–(35).

(32) Plaut. *Cas.* 998: *redi modo* ***huc intro***
'just you go back inside here'

(33) Plaut. *Persa* 200: *illic hinc abiit* ***intro huc***
'he's gone away from here inside here'

(34) Plaut. *Asin.* 329: *Ubinam est erus?* **::** *Maior apud forumst, minor* ***hic*** *est* ***intus***
'Where is the master? **::** The older one [is] at the forum, the younger one is inside here'

(35) Plaut. *Amph.* 112: *et meus pater nunc* ***intus hic*** *cum illa cubat*
'and my father is now inside here in bed with her'

These are particular cases of a widespread tendency of adverbials of place and time to occur hierarchically juxtaposed, to specify with increasing degree of precision the denotation intended (see the discussion and the examples in Pinkster 1972: 93–95). When this phenomenon involves just lexical adverbs, it is usually the case that a deictic or anaphoric adverb cooccurs with a further non-context-dependent place determination like 'inside/outside', 'above /below', and the like.[19] As (32)–(35) show, both linear orders are found. Not rarely, three spatial determinations occur, with a prepositional phrase added to the two adverbs, like Plaut. *Aul.* 334: *huc intro abi ad nos*, Plaut. *Epid.* 157: *eamus intro huc ad te*, Plaut. *Aul.* 617: *hic intus in fano Fide*. Even three adverbs are attested:

(36) Ter. *Ad.* 453: *utinam* ***hic prope*** *adesset* ***alicubi*** *atque audiret haec!*
'if only he were here nearby somewhere and could hear all this!'

19. A nonexhaustive list of such combinations in Plautus includes also *eo intro* (*Bacch.* 907), *hic foris* (*Men.* 332), *hic prope* (*Mil.* 994), *huc foras* (*Poen.* 257), *illuc intro* (*Merc.* 570), *illuc procul* (*Persa* 467). The fact that the examples come from pre-Classical texts should merely be due to the favorable space deictic context provided by comedy: analogous phrases with time deictic expressions are indeed common in Cicero's letters (see n. 26).

As seen from the examples above, the most common direction and location adverbs have no transparent morphological structure. However, some regular derivational formations from adjectives expressing spatial notions are also attested. Quite normal are *longe* and *superne* (possibly not derived from *supernus*, however; see *OLD* s.v.), which are also found as direction arguments, for instance in (37)–(38):

(37) Plaut. *Most.* 389–390: *si ego aduenientem ita patrem faciam tuom / non modo ne* ***intro*** *eat, uerum etiam ut fugiat* ***longe ab aedibus****?*
'if I arrange it so that when your father arrives, not only will he not go inside, but so that he will even run away far from the house?'

(38) Plin. *nat.* 19,76: *solum enim hoc genus* ***superne*** *tendit, non, ut cetera, in terram*
'only this kind (of turnip) grows upward, not down into the ground as the others do'

For some other (less common) derivationally formed adverbs of place, see Section 4.2.1.

3.2.2 Manner (and other) adverbs as arguments

Like location adverbs, manner adverbs, which usually occur as circumstantials, can be arguments with specific kinds of predicates. The most typical of them are verbs meaning 'behave' and 'treat', like *se habere* in (39) and *tractare* in (40):

(39) Ter. *Ad.* 45: *semper* ***parce*** *ac* ***duriter*** *se habere*
'he always treats himself frugally and rigorously'

(40) Cic. *Att.* 2,7,3: ***subcontumeliose*** *tractatur noster Publius*
'our Publius is being treated in a rather insulting way'

Manner adverbs denoting languages are clearly arguments when they occur with predicates like *loqui* 'speak' or *scire* 'know',[20] as in (41):

20. Incidentally, this is a feature which opposes Latin to all its (Western) Romance descendants, which do not allow *-ment(e)* adverbs derived from ethnic adjectives to occur with the verb 'speak' or 'know' (the same holds for English equivalents in *-ly*).

(41) Gell. 17,17,2: *quod loqui **Graece** et **Osce** et **Latine** sciret*
'because he (Ennius) was able to speak Greek and Oscan and Latin'

Note, however, that a verb like *loqui* can also take as argument other kinds of manner adverbs, derived from qualifying adjectives. This is the case in (42):

(42) Cic. *top.* 67: ... *philosophis, sed eis qui **ornate et copiose** loqui possunt*
'... to philosophers, but those who can speak elegantly and fluently'

When *loqui* or *scire* is found with both kinds of (noncoordinated) manner adverbs,[21] the one denoting the language is presumably the argument, independent of the linear order of the two:

(43) Cic. *fin.* 2,19: *cum uterque **Graece egregie** loquatur*
'as both speak Greek very well'

(44) Cic. *de orat.* 2,265: *nostros homines similes esse Syrorum uenalium: ut quisque **optime Graece** sciret, ita esse nequissimum*
'[that] our contemporaries are like Syrian slaves: the better they know Greek, the worst they are'

Manner adverbs can also be considered arguments when they cooccur with the copula, where more usually adjectives are found. Hofmann & Szantyr (1965: 171) qualifiy these uses as particularly informal.

(45) Plaut. *Amph.* 965: *Habui expurigationem; facta pax est.* **::** ***Optume** est*
'I had an excuse; peace has been made **::** That's perfect'

A widespread construction of this kind is the type *mihi bene* (*male*, *aegre, melius*) *est* 'I am well (etc.)':

21. Interestingly, Pinkster (1972: 113) remarks that examples are also found where the two kinds of manner adverb occur in coordination: Cic. *Phil.* 7,17: *plane et Latine loquuntur* 'they speak clearly and in Latin'. In such cases the whole coordinated adverb phrase should have the status of an argument.

(46) Cic. *Verr.* II 4,95: *numquam tam* ***male est Siculis*** *quin aliquid facete et commode dicant*
'things are never so bad for Sicilians that they are not able to say something witty and appropriate'

(47) Cic. *Att.* 12,23,3: *de Attica molestum, sed quoniam* ***leuiter, recte esse*** *confido*
'I am sorry to hear about Attica, but since it's a slight attack I trust it's all right'

Quantity adverbs occur with the copula as well, as in the very common expression *satis est* 'it's enough'. Finally, duration adverbs can be arguments with specific predicates, such as *durare*:

(48) Sen. *benef.* 6,31,4: *inmodica numquam regi posse, nec* ***diu*** *durare, quidquid regi non potest*
'[that] immoderately large forces can never be controlled, and that anything that cannot be controlled does not last long'

4. Sentence adverbs

4.1 General overview

In the English sentence *cleverly, he did not react*, given as (1b) above, the meaning contrast with (1a) – enhanced by the opposite scope relation between the adverb and the sentential negation – is clear enough to show without doubt that adverbs can modify syntactic units of higher order than the bare predicate. The resulting class of "sentence adverbs", however, necessarily requires further internal classification. There is a good deal of work on this topic with reference to modern languages and according to different scholarly traditions. Among the first insightful approaches, at least Greenbaum (1969), Jackendoff (1972), and Bellert (1977) should be mentioned. More recently, in both generative and functionally oriented theoretical frameworks (cf. especially Alexiadou 1997, Cinque 1999, and Ernst 2002 for the former and Dik et al. 1990 for the latter) much attention has been paid to reciprocal compatibility and/or ordering of sentence adverbs as key tests to detect hierarchical levels within the sentence/utterance. For a typological perspective, see

Ramat and Ricca (1998). In the following we will basically employ – without unnecessary technicality – the conceptual and terminological proposals codified within the framework of Dik's Functional Grammar (see especially Hengeveld 1990; Dik et al. 1990; Dik 1997: 217–245, 291–307).[22] Extensive use of this model has already been made with respect to Latin: cf. in particular Pinkster (1995, 2004)[23] and Bolkestein (1989, 1993).

Following a functionally oriented approach, sentence adverbs are viewed as modifying different semantic levels of the sentence/utterance. In the treatment by Dik et al. (1990), there are basically three levels outside the core predication (which comprises the nonnuclear predicate modifiers discussed in Section 3.1), and sentence adverbs can by classified according to the level they refer to.

(i) Some adverbs act on the event (or state of affairs) denoted by the sentence. These are the time and place adverbs (like *recently* and *here*), which provide the spatio-temporal setting of the event, and most frequency adverbs (like *often*), when they quantify the number of distinct occasions in which a given event takes place (in some cases frequency adverbs have to be taken as predicate modifiers, see Section 4.2.2);

(ii) Several kinds of adverb act on the the propositional content of the sentence. This wide class is labeled on the whole "content disjuncts" in Quirk et al. (1985: 620–631) or "attitudinal satellites" in Dik et al. (1990: 35–36). The main subclasses are the following:
   - participant-oriented evaluative adverbs (like *wisely* in *wisely, John answered the question*);[24]
   - event-oriented evaluative adverbs (*fortunately*, *strangely*);
   - modal adverbs (*probably*, *hopefully*);

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22. We do not intend to take into account the somewhat radical evolution occurring within Functional Grammar model(s) in most recent years. The interested reader is referred to Mackenzie and Gómez-González (2004).

23. I received Pinkster (2004), which discusses issues quite parallel to those dealt with in this chapter, only after submitting the manuscript. Some reference to it, however, will be found in Sections 4.3–4.6.

24. Some participant-oriented evaluatives, like *kindly*, are not considered disjuncts by Quirk et al. (1985: 569–572); they are labeled "courtesy subjuncts".

– domain adverbs (*politically* ‘from the political point of view’ in *politically, it’s nonsense*).[25]

(iii) Other adverbs act at a still higher level, namely the speech act associated with the utterance, and are grouped under the label “style disjuncts” in Quirk et al. (1985: 615–620). Some qualify the speaker’s illocutionary force (like *frankly* in *frankly, you are wrong*); others comment metalinguistically on the utterance (like *briefly* in *briefly*, *he will not get the job*).

Adverbs in each level take those in lower levels under their scope; moreover, in both Quirk et al.’s (1985) and Dik et al.’s (1990) approaches, within sentence adverbs a sharp line is traced between those under (i) and the others. Adverbs in levels (ii) and (iii) involve Speaker’s evaluation and therefore in Dik et al.’s model they are grouped under a higher “interpersonal level” (the term going back to Halliday 1970), with respect to “lower” sentence adverbs under (i), which pertain to the “representational” level of the sentence together with predicate adverbs. Quirk et al.’s terminology of “adjuncts” vs. “disjuncts” focuses more on syntactic autonomy than on semantics, but the dividing line is essentially the same.

A last remark concerns modality. Not every indication of a truth value for a given state of affairs necessarily belongs to the interpersonal level. Expressions like “It is possible that ... ”, identified as “epistemic objective modality” at least since Lyons (1977, 2: 797–809), may simply locate the event with respect to a scale of probability quite in the same way that other linguistic means locate it in time or space, without the sort of Speaker’s commitment typical of “higher” adverbs. The distinction has linguistic relevance (see Nuyts 1993), although it may be difficult to get uncontroversial contrasts from textual data. See further Section 4.4.

The examples above have been given in English on purpose. Indeed, it is by no means obvious that all the subclasses successfully identified for modern European languages find a correspondence in Latin texts. More problemati-

25. Domain adverbs (so called in Bellert 1977) are not mentioned in Dik et al. (1990), and they are not considered disjuncts by Quirk et al. (1985: 568–569), who call them “viewpoint subjuncts”. However, they seem to act on the propositional content of the utterance. For a discussion, see Bertuccelli Papi (1992).

cally, it may be questioned whether the kind of evidence offered by a dead language allows us to draw safe conclusions in this field.

As a matter of fact, sentence adverbs belonging to different (sub)classes, like *unfortunately* and *probably*, or *frankly* and *politically*, seldom occur together in the same sentence in real texts even in languages like English or Italian which make extensive use of them, so that native speakers' judgments prove necessary to evaluate subtle syntactic differences between them. As for Latin, where native speakers are obviously not available, there is little chance of getting information from textual corpora sufficiently detailed to identify all different subtypes on purely syntactic grounds. Moreover, due to the characteristics of Latin word order, we cannot really expect to find unequivocal syntactic criteria for discriminating between predicate and sentence adverbs, unlike English. In particular, the initial positions in the sentence (to the left of the subject, when the latter is expressed) are by no means excluded for predicate adverbs, as shown in Section 3.1.1 above.

On the other hand, it is perfectly legitimate to try to collect the available positive evidence in order to establish which functions, among those listed above, can be identified beyond doubt in (some) Latin adverbs as well. We try to do so in the following subsections.

4.2 Adverbs related to state of affairs

4.2.1 Adverbs of setting: Time and place

Adverbs expressing temporal circumstance tend to be specialized as sentence modifiers. Their case is different from those discussed in the following sections, where the same items may often act on both sentence and predicate. On the other hand, some circumstantials of time can also be used as textual connectors (see further Section 4.7).

The basic adverbs of temporal circumstance are morphologically underived items (at least synchronically), including the deictics *nunc, tunc, nuper, hodie, heri, cras, perendie*, the anaphoric *pridie, postridie, post(ea)*, *deinde*, etc., and the nondeictic *mane, uesperi*, *noctu, primum*, etc. Like the location adverbs discussed in Section 3.2.1, they may occur in hierarchical sequences, where the context-independent item specifies the other one. See for instance (49)–(50):

(49) Cato *agr.* 1108,2: *uinum ponito sub dio.* ***Postridie mane*** *gustato*
'place the wine in the open. Taste it the next morning'

(50) Cic. *Att.* 10,11,4: *sed Antonius uenit* ***heri uesperi***
'but Antonius came yesterday evening'[26]

Derivations from adjectives referring to time periods are also attested, although rarely via the most productive suffixes *-ē/-(i)ter.*[27] Several end in *-ō*, as stated in Section 2.2.5. An instance is given in (51):

(51) Plin. *nat.* 7,181: *nullis euidentibus causis obiere, dum calciantur* ***matutino***, *duo Caesares*
'two Caesars died from no evident causes, while putting their shoes on in the morning'

From *antiquus*, the usual derived temporal adverb is *antiquitus* 'from/in ancient times' (not in Cicero), *antique* being normally limited to the manner meaning 'in the way/style/language of the ancients'.[28] **Recenter* appears to be blocked by the deadjectival conversion *recens*, which is used adverbially since pre-Classical Latin (e.g., Plaut. *Cist.* 135–6: *puerum aut puellam* [. . .] *recens natum*), and also by the predicative use of the base adjective. Apparently (cf. *OLD* s.v.) as an adverb *noue* 'in a novel manner' does not occur in the temporal meaning of *nouus* 'recent'; however, its superlative *nouissime* certainly does, as in (52):

(52) Brut. *Cic. epist.* 11,20,1: ***nouissime*** *Labeo Segulius . . . narrat mihi apud Caesarem se fuisse . . .*
'most recently L. Segulius told [lit. tells] me he had been at Caesar's . . . '

26. Other combinations are: *pridie uesperi* (Cic. *ac.* 1,1), *uesperi pridie* (Cic. *Att.* 10,4,7), *hodie mane* (Cic. *Att.* 13,9,1), *cras mane* (Cic. *Att.* 14,11,2), *perendie mane* (Cic. *epist.* 16,17).

27. Apparently there are no cases of derivations from adjectives like *annuus* 'yearly', *menstruus* 'monthly', which are quite usual in Romance languages. *Annuatim* (presumably blocked by *quotannis*) is registered in *ThLL* beginning with Valerianus (d. ca. 460).

28. The contrast is mentioned in Rosén (1999: 61). Cf., however, the plausibly temporal meaning of *antique* in Catull. 34,23: *antique ut solita es* 'as you [the moon] are used from ancient times'.

With a different function from that of temporal setting seen so far, aspectual adverbs like *paulatim* 'gradually', which in first instance pertain to predicate adverbs (see Section 3.1.3), may also take scope on whole sentences. A very clear example from Torrego (2002: 385) is (53):

(53) Quint. *inst.* 10,3,9: ***paulatim*** *res facilius se ostendent, uerba respondebunt, compositio sequetur, cuncta denique ut in familia bene instituta in officio erunt*
'bit by bit, thoughts will suggest themselves more easily, words will come, composition will follow and everything will finally play its part just like a well-run household'

In (53), *paulatim* characterizes the graduality of the whole process (the learning of good writing) denoted by the sequence of the four following coordinated sentences; therefore, it cannot be linked to the first predicate only. Other aspectual adverbs, such as *repente/subito* 'suddenly', can also modify whole sentences, but their precise location with respect to the threefold layering of sentence modifiers is more problematic. See Torrego (2005) and n. 32 below.

As for circumstantial adverbs of place, they are the ones already mentioned in Section 3.2.1 as arguments. As noted there, very few derivations from adjectives expressing spatial relations (cf. Eng. *internally*, *locally*, *regionally*, etc.) are commonly in use in Classical Latin. To the current *longe* and *superne* mentioned in Section 3.2.1, we could add *proxime* (but see Section 7.2) and three instances of *inferne* (with *-ĕ*, however!) in Lucretius:

(54) Lucr. 6, 597: *tecta* ***superne*** *timent, metuunt* ***inferne*** *cauernas*
'they are afraid of the houses above, and of the caverns below'

Normally, in Classical Latin only the comparatives (like *inferius*, *interius*, *exterius*) are found, possibly due to their identity with the neuter of the adjective. In later times, although several conceivable formations remain unattested, additional ones appear. If *interne* is first attested in the IVth century (Auson. 24,142: *distinctas interne uias mirere domorum*), *intime* can be taken as having basically a spatial meaning, although referred to the depth of body and soul, in (55):

(55) Apul. *met.* 2,7: *discede, inquit, miselle, quam procul a meo foculo, discede. Nam si te uel modice meus igniculus afflauerit, ureris* ***intime***
‘get as far away as you can from my fire, poor boy, get away. For if my little flame should blow against you even slightly, you will burn deep inside’

Localiter, not attested in Classical Latin, is not uncommon in later authors (especially Christian ones from Tertullian onward and in grammarians in a technical sense, see *ThLL* s.v.). In the following instance from Ammianus, a purely spatial meaning is quite clear:

(56) Amm. 19,12,3: *hic Besae dei* ***localiter*** *appellati, oraculum quondam futura pandebat*
‘here in old times the oracle of a god locally called Besa revealed the future’

With a quite similar meaning, *regionaliter* appears once in *de mundo*, an adaptation of a Greek treatise widely attributed to Apuleius (the comment including the adverb is absent in the Greek original). *Regionatim* is found already in Liv. 45,30,2 and Suet. *Iul.* 39,1, but with distributive meaning (‘by regions/quarters’).

(57) Apul. *mund.* 23: *quae tamen illi cum* ***regionaliter*** *uideantur esse pestifera, ad omnem salutaria sunt*
‘however, these events, although regionally appearing to be catastrophic for it (i.e., the earth), are beneficial for it as a whole’

4.2.2 Frequency adverbs

Adverbs of frequency can act at two different levels, as shown by English sentences like *On seven occasions John washed his hands twice* (Moreno Cabrera 1988: 149). The internal quantifier *twice* specifies the number of similar events which occur within a particular time period, and the external quantifier *on seven occasions* quantifies over time periods. The external quantifier has scope over the internal one, and only the former can be considered a sentence modifier.

The productive series of adverbial quantifiers derived from numerals via the suffix *-iē(n)s* (see Section 2.2.4) can occur both as internal and external

quantifiers. Moreover, Latin has several nonnumeral frequency adverbs like *numquam* 'never', *nonnumquam* 'sometimes', *raro* 'rarely', *saepe/crebro/frequenter/subinde* 'often', *semper* 'always', *cotidie* 'every day', which usually cover the external function; but at least some of them, like *raro* and *saepe*, can also be predicate modifiers (see the discussion in Section 7.1, and Cinque 1999: 91–93 with reference to It. *spesso* 'often'). An example involving several adverbial quantifiers in a row is given in (58):

(58) Cic. *Brut.* 308,6: *primas in causis agebat Hortensius, magis magisque* ***cotidie*** *probabatur Antistius, Piso* ***saepe*** *dicebat,* ***minus saepe*** *Pomponius,* ***raro*** *Carbo,* ***semel aut iterum*** *Philippus*
'Hortensius held the first place in pleadings, Antistius was being appreciated more and more every day, Piso spoke often, less often Pomponius, Carbo rarely, Philippus only once or twice [lit. 'a second time']'

The internal quantifier function of denumeral adverbs shows up clearly when they cooccur with nonnumeral frequency adverbs which have scope over them, as *saepe* and *cotidie* in (59)–(60):

(59) Sen. *contr.* 7, pr.1: *cum* [i.e., *Albucius*] *populo diceret, omnes uires suas aduocabat et ideo non desinebat.* ***Saepe*** *declamante illo* ***ter*** *bucinauit*
'but whenever he spoke in public, he used to summon up all his powers and for this reason he didn't stop. Often, while he was speaking, the trumpet blew three times'

(60) Cels. 3,21,10: *quin etiam* ***cotidie ter quaterque*** *opus est uti frictione uehementi*
'and furthermore it is good to proceed with vigorous rubbing three or four times every day'

4.3 Evaluative adverbs

In Quirk et al. (1985), the criterion for distinguishing between evaluative and modal adverbs is that the former "present a comment on the truth-value of what is said" (620), while the latter "convey some attitude towards what it is

said" (621). Thus evaluative adverbs are factive: they do not modify the truth value of the utterance.

As mentioned in Section 4.1, a further subdivision is usually made within evaluative adverbs, between those like *wisely, rightly*, whose comment on the event can be referred to the main animate participant, and those like *(un)fortunately, strangely, unexpectedly*, which express an evaluation of the event proper. There are no fully established terms for these two subtypes: we have chosen the transparent labels used in Ramat and Ricca (1998: 191), "participant-oriented" and "event-oriented".

In languages like English, the group of evaluative adverbs is the most productive among all sentence modifiers, particularly the event-oriented ones (see Swan 1988: 476–494). In Latin, both subclasses of evaluative adverbs occur, although it is not easy to find absolutely clear-cut examples, and on the whole, their use appears to be less pervasive than in modern European languages.

It is worth remarking that the boundary between the two subclasses can be hard to draw in the case of adverbs derived from adjectives which can apply to both animate beings and events. For instance, in (61), the translation given for *ridicule rogitas* suggests an interpretation of *ridicule* as a participant-oriented evaluative (as in the cases found in Section 4.3.1); but the alternative interpretation 'it is ridiculous that you keep on asking ...', which is also perfectly viable, would put *ridicule* among the event-oriented evaluatives in Section 4.3.2.

(61) Plaut. *Trin.* 905: ... *nouistin hominem?* **::** ***Ridicule rogitas***, *quicum una cibum capere soleo*
'... do you know the man? **::** You are ridiculous in asking me about someone I am used to eating with'

By the same token, adverbs like *recte* 'rightly' or *falso* 'wrongly' are usually included, as is done here, among the participant-oriented evaluatives, but clearly they express a judgment (often of legal and/or moral character) about the event as well. Therefore, Pinkster (2004: 195) prefers to assign these items to a third subtype – which, incidentally, seems to be the most frequent in Latin texts.

4.3.1 Participant-oriented evaluatives (the type stulte *'acting stupidly')*

Like its English counterpart, an adverb like *stulte* 'stupidly' can be used as both a predicate and a sentence modifier. An instance as a predicate modifier has been given in (8). In (62), *stulte* acts at a different level, qualifying the subject's behavior and not the way the action is performed:[29]

(62) Cic. *Rab. Post.* 5: *nec suam solum pecuniam credidit sed etiam amicorum,* ***stulte***
'and he did not only lend his own money, but also that of his friends, foolishly'

The same holds for *recte, falso, inepte* in (63)–(65), as made explicit by the translations:

(63) Cic. *Flacc.* 59,3: *si licuit . . . , patris pecuniam* ***recte*** *abstulit filius*
'if it was legal (for Flaccus's father to make use of the money), the son was justified in taking his father's money'

(64) Sall. *Iug.* 1,1: ***falso*** *queritur de natura sua genus humanum*
'human beings mistakenly complain about their nature'

(65) Suet. *Vesp.* 12: *ut . . . non reticuerit, merito se plecti, qui triumphum . . . tam* ***inepte*** *senex concupisset*
'. . . to the point that he (Vespasian) did not hesitate to say that he was rightly being punished having been so foolish to desire the triumph at his age'

29. The status of *stulte* as a sentence adverb in (62) would not change if one accepts the alternative punctuation given in the Teubner edition: . . . *etiam amicorum. Stulte, quis negat . . . ?* 'Foolishly, who denies it . . . ?'. *Stulte* would still qualify (elliptically) the whole preceding sentence (particularly the subject's behavior) and not just the predicate *credidit.*

Their occurrence in passive sentences, as in (66), is the main reason to label these uses as "participant-" rather than "subject-oriented", since the latter definition misleadingly refers to the syntactic role[30]:

(66) Cic. *Tusc.* 3,75: *additur ad hanc definitionem a Zenone* ***recte***, *ut* …
'an addition to this definition it is rightly made by Zeno, that … '

In the above cases, sentence modification is identified by a semantic criterion: a paraphrase like 'he was A in acting so' is preferable to that suited to predicate modification, namely 'he acted in an A way'. In the absence of native speakers, this procedure may be rather vague. Nevertheless, despite the skepticism displayed by Pinkster (1972: 96–101) about the reliability of semantic criteria alone, cases like those shown above seem reasonably clear-cut. It is true, however, that the criterion becomes difficult to apply in many other instances. Indeed, the neatness of the semantic contrast depends heavily on the particular semantics of both the verb and the adverb involved. For instance, with verbs of saying, the two meanings 'he answered cleverly' and 'cleverly, he answered' are well separated. On the contrary, when the same adverb co-occurs with verbs denoting actions, the distinction may fade out. This is the case of *callide* in (67), where the adverb can be interpreted equally plausibly as a sentence or a predicate modifier (the translation given reflects the first choice):

(67) Liv. 22,26,4: *[C. Terentius Varro] iam ad consulatus spem cum attolleret animos,* ***haud parum callide*** *auram fauoris popularis ex dictatoria inuidia petit*
'as (Varro) now raised [his] expectations to aspire to the consulship, not without cleverness he tried to capture people's favor by exploiting their hostility against the dictator'

Fortunately, it is possible, even if rare, to meet instances in texts where other kind of evidence can be added. Particularly indisputable cases are found when the main predication is negated. In (68)–(69) the adverb *recte* is undoubtedly outside the semantic scope of negation, which rules out its inter-

30. Another instance in Cic. *Phil.* 5,27,12: *recte ad eum legati missi* 'the ambassadors were rightly sent to him'.

pretation as a predicate modifier (cf. Dik et al. 1990: 60). Notice that syntactic position alone would not be sufficient: an adverb placed before *non* may still be a predicate modifier, as in (18)–(19) in Section 3.1.1.

(68) Cic. *Verr.* II 3,168: *binas centesimas [pecunias] ab sese ablatas ferendum non putant, et* ***recte non*** *putant*
'they do not consider it acceptable that two percent of the amount [*scil.* every month] should be taken from them, and rightly don't'

(69) Cic. *Att.* 9,9,2: ***recte*** *de numero militum* ***non*** *credis*
'you are right to be incredulous about the number of soldiers'

Another convincing but uncommon situation is found when a possible sentence modifier is juxtaposed to a manner predicate modifier. The absence of coordination signals that the two modifiers act at different hierarchical levels. One such example is mentioned by Pinkster (1972: 32) again for *recte*:

(70) Cic. *fin.* 5,27: *etsi ea quidem, quae adhuc dixisti, quamuis ad aetatem* ***recte*** *isto modo dicerentur*
'Even if exactly what you have said up to this point could rightly be said in this way for whatever age'

The use of manner adverbs with sentence modifier function is already attested in Early Latin, as Plautus's example (61) shows. The following occurence in Ennius adds further evidence from the same period:

(71) Enn. *trag.* 105: *Andromachae nomen qui indidit,* ***recte*** *ei indidit*
'whoever gave Andromache ('Man-fighter') her name, gave it to her rightly'

4.3.2 Event-oriented evaluatives (the type opportune *'fortunately')*

An item widely used as an event-oriented evaluative adverb in Latin is *opportune* 'luckily, at the right moment'. It clearly expresses a speaker's evaluation in (72):

(72) Plaut. *Truc.* 852: *sed nimium pol* ***opportune*** *eccam eapse egreditur foras*
'but even too luckily, she is coming out herself'

Example (73) is also particularly telling, by virtue of the [–animate] subject and the stative predicate:

(73) Liv. 6,36,1: *alia bella* ***opportune*** *quieuere*
'there was fortunately a respite from other wars'

A slightly different use (perhaps intermediate between participant- and event-oriented evaluation) involves *bene/male*. Examples are cited already in Kühner & Stegmann (1955, 1: 795) and Hofmann & Szantyr (1965: 827), where they are interpreted in terms of "Prägnanz":

(74) Cic. *Tusc.* 3,34: *principio* ***male*** *reprehendunt praemeditationem rerum futurarum*
'first, they are wrong in censuring the reflection in advance of possible future events'

(75) Tac. *ann.* 3,44: *miseram pacem uel bello* ***bene*** *mutari*
'it was good to exchange a horrible peace even for war'

For many other Latin lexical counterparts of English adverbs like 'incredibly' (*incredibiliter, mirabiliter, mire*), 'unexpectedly' (*necopinato*, *inopinato, inopinate*), 'strangely' (*inusitate*), and also '(un)fortunately' (*(in)feliciter*, *(in)commode*), it is difficult to find unequivocal contexts of sentence modification. More often, occurrences are found which leave open the possibility of a sentence modifier alongside a predicate modifier interpretation, because the semantics of the predicates involved do not allow us to keep them neatly apart.[31] Take for instance the following occurrence of *inusitate* (a very rare adverb in any case):

(76) Gell. 17,2,16: ***inusitate*** *'diurnare' dixit pro 'diu uiuere', sed ex ea figuratione est, qua dicimus 'perennare'*
'he (Cl. Quadrigarius) unusually said *diurnare* to mean 'live a long time', but this is justified by the figure by which we say *perennare*'

31. Similar observations have been put forward by Swan (1988: 148–149, 157) concerning the difficulty – or even the impossibility! – of separating sentence from predicate modification in case of evaluative adverbs like *wundorlice* 'miraculously' when Old English texts are analyzed.

We might interpret the statement as commenting that the lexical choice of Cl. Quadrigarius is unusual, thus giving *inusitate* scope over the entire sentence; or instead link the adverb directly to the verb *dicere* ('he said in an uncommon way'). The semantic difference is slight, and we cannot ask Gellius what he intended precisely.

When adverbs meaning 'unexpectedly' are found in collocation with verbs of motion, their meaning is not really separable from 'suddenly'.[32] See, e.g., (77):

(77) Liv. 31,47,6: *L. Furius … Romam* ***inopinato*** *cum uenisset, senatum in aede Bellonae habuit …*
'Lucius Furius, after he had unexpectedly come to Rome, held the senate in the temple of Bellona'

In the following passage, *inopinate* clearly comments on the event; however, the context also makes it explicit that the surprise concerns the subject, not the speaker/writer:

(78) Aug. *conf.* 8,6,14: *et forte supra mensam lusoriam quae ante nos erat, attendit codicem, tulit, aperuit, inuenit apostolum Paulum,* ***inopinate sane****. Putauerat enim aliquid de libris, quorum professio me conterebat*
'and by chance, on the gaming table in front of us, he (Pontitianus) noticed a book, took it up, opened it, and found St. Paul the Apostle, quite against his expectations: he thought it was one of those books whose teaching was exhausting me'

Probably a better instance of a really speaker-oriented evaluative interpretation is found in (79) (although the writer/narrator is also a participant):

32. On the other hand, Torrego (2002: 386) takes the semantic connection of 'suddenly' and 'unexpectedly' (cf. Cic. *Catil.* 3, 11 *repente prater opininonem omnium confessus est* 'suddenly, against everyone's expectations, he confessed', to which coordinations like Aug. *epist.* 126,3 *repente atque inopinate* could be added) as an argument to include *repente* among disjuncts as well, possibly even with greater speaker-orientation than the 'unexpectedly'-type expressions (Torrego 2005: 765). The matter is difficult to judge.

(79) Cic. *fin.* 3,8: *quod cum accidisset ut alter alterum* ***necopinato*** *uideremus, surrexit statim*
'since it so happened that each of us unexpectedly saw the other, he rose at once'

Finally, it must be stressed that it is difficult to find an adverbial expression in Latin for such a common notion as that expressed by English *unfortunately* (and still more often by It. *purtroppo* or Ger. *leider*, cf. Menge 2000: 241), which seems to be the most recurrent lexicalization for evaluative adverbs cross-linguistically (Ramat and Ricca 1998: 240). To express a negative evaluation of the event, adverbs like *infeliciter* or *(per)incommode* tend rather to occur in a more explicit construction, as predicate modifiers of verbs meaning 'happen', as in (80):

(80) Cic. *Att.* 1,17,2: *sed accidit* ***perincommode*** *quod eum nusquam uidisti*
'but most unfortunately it happened that you did not see him anywhere'

However, occasionally the same adverbs have to be given a speaker-oriented reading, even in pre-Classical times. Both appear in the following comedic dialogue, which also shows a semantic ordering between the two:

(81) Ter. *Eun.* 328–330: *Is, dum hanc sequor, fit mi obuiam.* **::** ***Incommode*** *hercle.* **::** *Immo enimuero* ***infeliciter****; nam incommoda alia sunt dicenda, Parmeno*
'He (Archidemides) runs into me while I am following this (girl) **::** Quite inconveniently! **::** Rather catastrophically indeed; other things deserve to be called inconvenient, Parmeno'

A clear Late Latin instance of the antonymic pairs *feliciter*/*infeliciter* is:

(82) Zeno 1,5,11: *o caeca mens hominum! Quam uarie, unam tamen contendit in mortem: pauper, cum opes* ***infeliciter*** *quaerit, quas* ***feliciter*** *non habet; diues, cum diuitias putat se non habere, quas habet*
'o blind human mind! How differently it converges toward one and the same death: the poor man, when – to his misfortune – he looks

for the riches he fortunately does not have; the rich one, when he thinks he does not have the goods that he has'

The sentence modification value in (82) is beyond doubt. Semantically, the judgment that the poor are fortunate not to possess any goods comes clearly from the speaker/writer and has little chance of being shared by the subject. Further evidence is given by the fact that *feliciter* is outside the scope of negation. Still, the issue concerns the participant's fortune/misfortune (although from the speaker's perspective) and not the speaker's, as in (81).

4.4 Modal adverbs: The type *certe* 'certainly'

Modal adverbs are a highly restricted class in modern European languages, as presumably in most or all languages. Latin surely has epistemic modal adverbs which evaluate the truth value of the sentence from the subjective point of view of the speaker. However, basically only two grades are distinguished: maximum probability (*certe/profecto* 'certainly') and medium probability (*fortasse/forsitan* 'perhaps'; many examples for all four in Kühner & Stegmann 1955, 1: 797–813). There is no dedicated adverbial item for expressing high probability comparable to Eng. *probably* as distinct from *perhaps. Probabiliter* is attested, but mainly as a manner predicate adverb with the sense of 'in a manner worthy of approval', 'plausibly', as is shown by coordinated structures like Cic. *orat.* 122: *rem breuiter exponere et probabiliter et aperte* 'to set forth the facts briefly, credibly, and clearly'. Maybe the beginning of an evolution toward modal meaning can be gleaned from instances like (83), for which, however, the *OLD* gloss of 'probably' seems to be quite premature:

(83) Cic. *fat*. 40: *quod cum uitiosum sit,* ***probabiliter*** *concludi putant non omnia fato fieri, quaecumque fiant*
'as this is erroneous, they believe that it may plausibly be inferred that not everything that happens, happens by fate, no matter what'

The same view is held by Pinkster (2004: 194), referring to the examples of *probabiliter* in the *ThLL.*

We will not enter into a detailed semantic discussion of modal adverbs here (for *fortasse/forte/forsitan*, see e.g. Orlandini 1997). As a standard test to show their belonging to the "interpersonal" level, we may remark that *certe*, *profecto*, and *fortasse* may occur to the right of the sentence negator *non* or of negative quantifiers like *nemo*, without being affected by their scope (cf. Orlandini 2001: 326). See for instance (84)–(86):

(84) Cic. *Lael.* 10: *moueor enim tali amico orbatus, qualis, ut arbitror, nemo umquam erit, ut confirmare possum, nemo* ***certe*** *fuit*
'for I am indeed moved, being deprived of a friend such – as I believe – that I shall never again have an equal, and – as I can positively assert – a friend such as certainly no other man has ever been to me'

(85) Cic. *Flacc.* 52: *non est ita, iudices, non est* ***profecto***
'it is not so, judges, it is certainly not so'

(86) Cic. *Att.* 13,14–15,2: *nam triduo abs te nullas acceperam, nec mirum; nemo enim uenerat, nec* ***fortasse*** *causa fuerat*
'I have had no word from you for three days, which is not surprising, for no one has come; and perhaps there was no occasion'

However, the behavior of *certe* suggests that in some occurrences it cannot be considered a proper equivalent of 'certainly' but rather expresses objective modality, like *it is certain that* ... in English. As noted in Section 4.1, in the architecture of Functional Grammar this kind of expression pertains to the state of affairs (or Predication) level.[33] A relevant test for the existence of a "lower", non-speaker-oriented meaning of *certe* is that, unlike *certainly*, it may occur in questions, although infrequently, even being the questioned item itself (and it then has to be translated with 'really, absolutely, with certainty'):

(87) Plaut. *Merc.* 186: *Certen* uidit? **::** *Tam hercle* ***certe*** *quam ego te aut tu me uides*
'He really saw (her)?' **::** 'As surely, by Hercules, as I see you or you see me'

33. See Hengeveld (1989: 137–139). That modal adverbs are not equivalent to assertions by means of modal adjectives is clearly shown by the full acceptability of their combination: *it's certainly possible that...*

(88) Cic. *leg*. 1,3: … *non ante quam mihi tu ipse responderis, Attice,* ***certen*** *… post excessum suum Romulus Proculo Iulio dixerit se deum esse …, et* ***uerumne sit****, ut Athenis … Orithyiam Aquilo sustulerit*
'… not until you yourself have answered me, Atticus, if it is certain that after his death Romulus told Iulius Proculus that he was a god, and if it is true that at Athens Aquilo carried off Orithyia'

In (88), the coordination of *certen* with the predicate nominal *uerumne sit* further suggests a parallelism of functions, with both elements expressing objective modality.

Further evidence comes from an instance like (89), where *certe* is focused through *quidem*, since subjective modal adverbs of the type of *certainly* should not be able to be focused (Dik et al. 1990: 40).

(89) Cic. *Tusc.* 1,70: *in quo igitur loco [animus] est? credo equidem in capite et cur credam adferre possum. Sed alias, ubi sit animus;* ***certe quidem*** *in te est*
'in which place is the soul? I think indeed in the head, and I can give reasons why I believe so. But we will discuss on another occasion, where the soul is. What is certain, is that it is in you'

Other synonyms of *certe* are *indubitate* – later also *indubitanter*, see *ThLL* s.v. – found only in the post-classical period, especially in juridical texts and Christian authors since Tertullian, and the more frequent collocation *haud dubie* (later *non dubie*), particularly common in Livy. *Dubie* is almost always found in this negative context, and its rare positive occurrences ('hesitatingly'; 'ambiguously') do not express modality. Latin here conforms to a widespread cross-linguistic reluctance for modal adverbs to be derived from adjectives expressing very low grades of probability: cf. English **improbably* (in the modal sense), vs. *probably*, **doubtedly* vs. *undoubtedly* (Nuyts 1993: 935–936). More generally, it is unclear whether the lowest grades of probability can be lexicalized by means of speaker-oriented adverbs at all (Ramat and Ricca 1998: 195). In Latin as well, items like *uix* 'hardly'/'scarcely' or *minime* 'by no means' are not on a par with the adverbs above but act at a lower level and should probably be placed among markers of objective modality.

This hierarchical order is supported by the (admittedly infrequent) instances of juxtaposition of the two:

(90) Ascon. *tog. cand.* 77, 21–22: *atque ut alia omittam, hoc* ***certe uix*** *uidetur dicturus fuisse, si illo patrono Catilina repetundarum absolutus esset*
'and to omit other things, certainly it seems scarcely possible that he would have said so, if Catiline had been acquitted of making threats with him (Cicero) as defender'

(91) Cic. *Mil.* 32.14: *cuius illi conatus ... nec cuperent reprimere, si possent, ..., et, si uellent,* ***fortasse uix*** *possent frangere hominis sceleratissimi conroboratam iam uetustate audaciam*
'they would not be anxious to restrain his (Clodius's) efforts if they could and, if they wished, perhaps they would scarcely be able to crush this most wicked man's audacity, well consolidated by time'

(92) Cic. *rep.* 1,9,2: *iam illa perfugia, quae sumunt sibi ad excusationem, ...* ***certe minime*** *sunt audienda*
'moreover, we should certainly not listen at all to the other excuses [...] to which these men resort'

Other common formations like *scilicet*, *uidelicet, nimirum* 'naturally, obviously, evidently' might also appear not to be semantically far from the modals of certainty, as stated by Pinkster (2004:194), but unlike *certe/profecto*, rather than expressing (from the speaker's perspective) the truth of an assertion, they comment on it, taking its truth more ore less for granted. Therefore, their main content should be of an evaluative nature. Like their English equivalents (cf. for instance Swan 1988: 49 on *naturally* and *predictably*, although she classes *obviously/evidently* among modals), they can also be viewed as occupying a transition zone between the two classes: Nuñez (2001: 521–522) places *scilicet* and *uidelicet* within modals but still keeps them distinct from *certe/profecto* by assigning the former to the evidential modality. There is no room here for any discussion of subtle meaning differences in this domain, which would be very delicate anyway, considering the obvious limitations on investigations of dead languages.

4.5 Domain adverbs

In all probability, the possibility of employing adverbs derived from relational adjectives as domain adverbs was quite restricted in Classical Latin. Lexical equivalents of English items like *philosophically, mathematically, poetically*, etc., are rare as such, but when they are attested, they do not appear to occur other than as predicate and/or adjective modifiers. A couple of instances of predicate modification are given in (93)–(94) (for adjective modification, see (117) in Section 5.1):

(93) Cic. *Brut*. 167,7: *easdem argutias in tragoedias satis ille quidem acute sed parum* ***tragice*** *transtulit*
'he (G. Titius) transferred the same refinements into his tragedies, quite cleverly but scarcely in tragic style'

(94) Cic. *fin*. 2,17: ***rhetorice*** *igitur, inquam, nos mauis quam* ***dialectice*** *disputare?*
'so do you prefer us to discuss according to the rhetorical rather than the dialectical mode of debate?'

Possibly *omnino* could be considered as a nonproductively derived member of the class when meaning 'in general', as in (95):

(95) Cic. *Lael*. 74: ***omnino*** *amicitiae conroboratis iam confirmatisque et ingeniis et aetatibus iudicandae sunt*
'as a rule, friendships have to be judged when both age and character are already strongly established'

Maybe a domain meaning can be also identified with adverbs denoting languages, when they define the language in which a metalinguistic assertion holds:

(96) Cic. *fin*. 2,12: *egone non intellego, quid sit* ἡδονή ***Graece***, ***Latine*** *uoluptas?*
'do I not understand what is ἡδονή in Greek, in Latin 'uoluptas'?'

In later phases of the language, better instances come from the typically Christian opposition between *corporaliter* 'physically, materially' and *spiritaliter* 'spiritually'. Not infrequently the two contrasting adverbs may be straightforwardly interpreted as conveying a domain meaning:

(97) Tert. *resurr.* 23: *cum ita nos mortuos faciat* ***spiritaliter*** *ut tamen et* ***corporaliter*** *quandoque morituros agnoscat*
‘since he (the Apostle Paul) considers us in this sense to be dead spiritually, so as to recognize that we will die also materially some time’

In fact, *corporaliter* is met in one earlier example, in Petronius, in a context already quite compatible with a domain reading:

(98) Petron. 61,7: *noueratis Melissam Tarentinam, pulcherrimum bacciballum. Sed ego non mehercules* ***corporaliter*** *⟨illam⟩ [autem] aut propter res uene[ra]rias curaui, sed magis quod benemoria fuit*
‘you knew Melissa of Tarentum, a pretty round thing. But, by Hercules, I did not care about her physically or for sexual pleasure, but rather because she had a beautiful character’

Finally, an instance of *pecuniariter* with the domain meaning of ‘from a financial perspective’ is quoted by Pinkster (2004: 197) from the juridical language (Gaius *dig*. 10,4,13), which he points out as a promising source of evidence for this kind of use.

4.6 Speech act adverbs: The type *breuiter* ‘in short’

In this domain the boundary between sentence adverbs and more particle-like discourse markers is difficult to trace. We will limit ourselves to the consideration of some deadjectival items where at least the morphological pattern points to adverb status, and which are also able to function as manner predicate adverbs (like *frankly* or *briefly* in English).

Probably one good instance of a deadjectival speech-act adverb in Latin is *uero*, when it means ‘I assure you, in all honesty’, namely when it expresses the speaker’s commitment to the sincerity of his utterance. An illustration of this meaning, taken from Kroon (1995: 300), is (99):

(99) Cic. *epist.* 14,2,1: *ad te* ***uero*** *et ad nostram Tulliolam non queo sine plurimis lacrimis scribere*
‘to you, for sure, and our darling Tullia I cannot write without a flood of tears’

However, *uero* is a highly polysemous item, and its uses range from being employed as a predicate adverb (in Early Latin only, later replaced by *uere*), to various sentence-oriented functions: the expression of objective modality ('it is true that ... '), the use shown above in (99), and finally its very common use as a connective adverb/particle. For details, we must refer the reader to Kroon's (1995: 281–332) recent and extensive study, and Rosén (this work, vol. 1).

A further difficulty in the semantic classification of derivations from *uerus* is that their lexical meanings are inherently borderline between evaluating the utterance as a proposition and as a speech act. In principle, no such ambiguity would arise for adverbs like *aperte* or *sincere*; unfortunately, no instance of them alone in the sense of 'frankly/sincerely speaking' has been found. To express this concept, Latin usually employs full subordinate clauses introduced by *ut* (Pinkster 1995: 43–44):

(100) Ter. *Phorm.* 654–656: *sed mi opus erat,* ***ut aperte*** *tibi nunc* ***fabuler***, *aliquantulum quae adferret qui dissoluerem quae debeo*
'but, to speak frankly with you now, I needed (a wife) who could bring with her a bit of money by which I could pay my debts'

Particularly common formulas involve again *uere* or the neuter adjective *uerum.* Cf. Cic. *inv.* 1,5 passim: *ut uere dicam*, Cic. *div.* 248: *loquamur*, Cic. *Att.* 4,1,1: *scribam*; Cic. *Att.* 9,10,3, Mart. 12,36,7: *ut uerum loquar*, Ov. *trist.* 5,12,59: *fatear tibi*, Sen. *epist.* 50,5,5: *dicam*. This *ut*-construction is really the standard way of modifying speech acts in Latin (Bolkestein 1993: 86, Pinkster 2004: 196) and can naturally be used with adverbs expressing other sorts of qualification, as *leuiter* in (101):

(101) Cic. *ac.* 2,127: *dubium est uter nostrum sit,* ***leuiter ut dicam***, *uerecundior?*
'then it is doubtful which of us is – to speak frivolously – the more modest?'

As for speech-act adverbs oriented toward the utterance, the adverb *breuiter* occurs alone in the sense 'to be brief', but possibly only in Pliny the Elder (with several attestations, cf. Plin. *nat.* 3,32; 3,39; 10,82), at least in Classical Latin:

(102) Plin. *nat.* 7,4: *et cetera [animalia] sentire naturam suam, alia pernicitatem usurpare, alia praepetes uolatus, alia nare: hominem nihil scire, nihil sine doctrina, non fari, non ingredi, non uesci,* ***breuiterque*** *non aliud naturae sponte quam flere!*
'and the fact that all other animals are aware of their own nature, some use speed [in running], others swift flight, others swim; but man knows nothing without education, he does not speak, walk, eat; in short, he cannot do anything by natural instinct except cry!'

The same *ut*-construction seen above is met elsewhere: Sen. *benef.* 2,18,3: *ut breuiter tibi respondeam*, Sen. *epist.* 75,11: *finiam*, Cic. *inv.* 1,44: *describamus,* Rhet. Her. 2,41: *scribam*, Ps. Quint. 278,8: *dicam*, etc. Occasionally, the verb of saying may be left unexpressed, but *ut* is maintained, as in (137) below in Section 6.

4.7 Time adverbs as textual connectors

Many different means contribute to textual coherence, turning a bare sequence of sentences into a text (or discourse). Anaphora is obviously one of them. At the lexical level a relevant role is played by discourse markers, which are particularly abundant in Latin and, together with other items, fall traditionally under the label of "particles" (Rosén, this work, vol. 1). Much research has been done in recent years on Latin discourse markers, and we refer the reader to the specific literature (cf. at least Rosén 1989, Kroon 1989, 1995, Hilton 1997/98, Risselada 1996, 1998a, 1998b). While many such items are fully opaque synchronically and specialized in their discourse functions, others may be at least partially motivated and/or display an extended polyfunctionality between discourse uses proper and other "lower" meanings acting within the sentence level: this is the case of *uero*, as seen in Section 4.6. Since we are dealing here with adverbs as exponents of a major lexical category, and mainly with productively derived ones, in this section we limit ourselves to the illustration of a particular subclass of these borderline items, which (still) possess a quite clear lexical meaning but may also contribute substantially to intersentential links: namely, those circumstantials of time which serve to characterize a sequence of events.

Latin has both nonderivationally formed adverbs in this domain (*postea, deinde, tum*, etc.) and deadjectival adverbs like *postremo* and two series derived from ordinal numbers (*primum/primo*, *tertium/tertio*).[34] An instance in which several of them occur with temporal denotation, referring to a chain of events, is given in (103), from Risselada (1998a: 89):

(103) Rhet. Her. 4,68: *modo consul* ***quondam***, *is* ***deinde*** *primus erat ciuitatis;* ***tum*** *proficiscitur in Asiam;* ***deinde*** *hostis et exul est dictus; post imperator, et* ***postremo*** *factus est consul*
'just previously consul, next he was first man of the state; then he sets out for Asia; next he is declared a public enemy and exiled; after that he is made general-in-chief and finally consul'

In (104), on the contrary, items like *deinde* and *postremo* help to sequentially organize a list of arguments, not of events. Note that the argument introduced by *deinde* is not even presented as an assertion, but is in the interrogative form:

(104) Rhet. Her. 3,38–39: *quorum rationem aliquot de causis inprobamus:* ***primum***, *quod in uerborum innumerabili multitudine ridiculums⟨t⟩ mille uerborum imagines conparare.* ***Deinde*** *cur uolumus ab industria quemquam remouere … ?* ***Praeterea*** *similitudine alia alius magis commouetur. …* ***Postremo*** *praeceptoris est docere, quemadmodum quaeri quidque conueniat*
'we disapprove of their method on several grounds. First, because among the innumerable multitude of words it is ridiculous to collect images for a thousand of them. Secondly, why do we wish to rob anybody of his initiative? Then again, one person is more struck by one likeness, and another more by another. Finally, it is the instructor's duty to teach the proper method of search in each case'

34. On the meaning distinction between *tertio* and *tertium* and the like, Kühner & Stegmann (1955, 2: 69–70) say that the former is found with temporal sequences and the latter in enumerations ("Aufzählungen"), but they also admit that the disctinction fades out in non-Classical prose. The long passage in Gell. 10,1, if reliable, seems to witness that the boundaries were quite fuzzy also to cultivated Roman speakers of the 1st century BCE.

Although in recent research both uses in (103) and (104) have sometimes been included among discourse markers, it seems more advisable to reserve the term for instances like (104). This is not to say, of course, that in (103) the adverbs do not play a role in text organization. They obviously do, but at the same time each of them still provides a temporal setting for a state of affairs (be it only anaphorically, relative to other events in the chain), and therefore also pertains to the representational level. Clearly this cannot be said for the adverbs in (104).

As Risselada (1998a: 93) points out, these latter adverbs do not pertain to the "interpersonal level" (in the sense given in Section 4.1) either, since they do not mark any particular commitment by the speaker/writer: the sequence of arguments is presented objectively, so to speak. For this function, which is "beyond" the sentence in the sense that it concerns textual-argumentative units, but does not involve speaker–addressee interaction, Kroon (1995: 73–89) speaks of the "presentational level of discourse".

The distinction between (103) and (104) is not properly a matter of the semantics of the items involved, which remains more or less the same, but rather of the kind of units they are coupled with. Sometimes only the wider context and/or encyclopedic knowledge allows us to identify the proper level of action of these sequencing adverbs. For instance, if the folllowing passage is taken in isolation, the sequence *primum* … *deinde* … *tum* … *post* could in principle be interpreted both temporally and argumentatively, although the wider information available leads quite certainly to an argumentative reading.

(105) Cic. *de orat.* 1,144: *in qua praecipitur* ***primum****, ut pure et Latine loquamur,* ***deinde*** *ut plane et dilucide,* ***tum*** *ut ornate,* ***post*** *ad rerum dignitatem apte et quasi decore*
'in which (i.e., in the above rules) it is prescribed: first, that we speak pure and correct Latin, secondly simply and clearly, thirdly with elegance, lastly in a manner befitting the dignity of our topics and with a certain grace'

The objective presentational function of *postremo* may be contrasted with another end-of-sequence discourse marker, *tandem* 'at last', where, on the contrary, the communicative intentions/attitudes of the speaker play a major role. *Tandem* shares with *postremo* the basic meaning of presenting the event (or argument) it associates with as the final one in a connected sequence,

but adds a crucial evaluation by the speaker that the given event/argument happened (or is presented) later than expected. For all details and examples we refer to Risselada (1998a).

4.8 From predicate to sentence adverbs: A historical perspective

It is tempting to attempt a synthesis of the different kinds of sentence adverbs presented so far from the point of view of general tendencies of semantic evolution, although the considerations below will have to remain quite preliminary.

It has often been claimed that the distinction between the representational level and the functions dealing with speaker's committment (what has been called the interpersonal level in Section 4.1) and/or text organization also has a diachronic correlate. These claims see the evolution of meaning as tendentially unidirectional (similar to grammaticalization in morphology), going from "lower" functions related to the event toward "higher", more subjective ones, involving the speaker's attitudes, and finally to text-organizational functions. One current label for this overall trend is "subjectification" (Traugott and Dasher 2002: 94–95).

Adverbs should be a promising field for verifying this hypothesis (cf. Traugott and Dasher 2002: 152–176), and it is surely easier to imagine their sentential and textual functions coming from a basic manner meaning rather that the other way around. For instance, many sentential functions treated in the subsections above may be seen as the result of the deletion of a verbal predicate from a converbal construction where the adverb is a predicate modifier: in particular, this can be the case for participant-oriented evaluatives (*acting stupidly* → *stupidly*), domain adverbs (*considering it politically* → *politically*), or speech act adverbs (*putting it frankly/briefly* → *frankly/briefly*) (Ramat and Ricca 1994: 310–311). The ambiguous contexts shown above for *callide* in (67) and *inusitate* in (76) can also be viewed, in a diachronic perspective, as suitable terrain for a process of reanalysis from predicate to sentence function – and hardly the other way around.

Empirical confirmation of the hypothesis above would require us to show positively that many sentence adverbs in a given stage of a language could be used only as predicate modifiers in previous stages of the language. The rich

study by Swan (1988) has found that this was indeed the case for many sentence adverbs in the transition from Old English to present-day English, and that the process can still be observed in present-day English, especially with manner adverbs being used more and more innovatively as event-oriented evaluatives (Swan 1988: 476–494).

On the whole, Latin adverbs provide some sure if limited evidence for the subjectification hypothesis concerning single items: for *uero*, predicate use is still present in Early Latin only, as seen in Section 4.4; *probabiliter* was basically a predicate manner adverb and had just begun its evolution toward the speaker-oriented meaning of Modern English *probably*, and so on. On the other hand, taking the subclasses as a whole, the main kinds of sentence adverb seem to be present from the very beginning of attested documentation: as seen in Sections 4.3.1 and 4.3.2, some rather clear instances of participant- and event-oriented sentence adverbs can be found in Plautus – beside modal and setting adverbs, of course.

It may be significant, however, that participant-oriented evaluatives are probably the most widespread type, since they are the most contiguous semantically to predicate modification and the less "disjunct" syntactically. On the other hand, in Swan's (1988: 499) words, "Speech act adverbials are the most speaker-oriented of all the sentence adverbs. … They are also the most disjunctive". Interestingly, Swan finds that they develop very late in the history of English, surfacing around the seventeenth century (Swan 1988: 434–435). Latin also seems to lack them almost altogether (apart from *uero* and *breuiter*, the latter possibly as an idiolectal feature of Pliny the Elder). Domain-type evaluations, too, are nearly absent in Latin: unfortunately, Swan does not take them into account in her investigation, so a comparison is not possible in this case.

5. Adverbs as modifiers of modifiers

Interestingly, the role of adverbs as adjective modifiers was not recognized by Roman grammarians.[35] In more recent times, a major question related

35. Pinkster (1972: 45 n. 1) tentatively traces back the first explicit remark on that topic to Iulius Caesar Scaliger's *De causis linguae latinae* (§ 158), first published in 1540.

to this function has to do with semantics. Traditional Latin grammars have tended to privilege one meaning, namely intensification/gradation. However, adverbs in their function as adjective modifiers display the same latitude of meanings they have elsewhere, not differently from modern Romance languages or English. In particular, they may perform for adjectives the same qualifying, restrictive function that adjectives have with respect to nouns.

As is made evident in the heading of this section, the adverbs under consideration are not categorially bound to modify adjectives, but, quite naturally from a functional point of view, freely extend to modify other kinds of items/phrases, provided that the latter perform a modifier role themselves in a given context. These instances are illustrated in Section 5.2.

5.1 Adjective modifiers

The most obvious subclass of adjective modifiers is provided by items with the specific semantics of grade and/or quantity (for the feasibility of the distinction between the two, as given for instance in Kühner & Stegmann 1955, 1: 792, cf. the doubts expressed in Pinkster 1972: 52–53), such as *multum/multo*, *magis*, *maxime*, *plus*; as downgraders, *paene, uix*, etc.

However, many adverbs whose semantics primarily express manner can also modify adjectives. Kühner & Stegmann (1955, 1: 793) and Hofmann & Szantyr (1965: 171) state that their interpretation as intensifiers is acquired from the given syntactic context. Their many examples include phrases like Cic. *Att.* 6,1,25: *belle curiosi*, Rhet. Her. 3,18: *bene firmam*, Cic. *Brut.* 101: *perfecte diserta*, etc., together with items quite advanced in the semantic shift toward intensifier meaning, such as *ualde* or *uehementer.*

Hofmann & Szantyr (1965: 799, 790) also remark that an adjective may be intensified by a strictly synonymous adverb (Plaut. *Trin.* 1008: *fac te propere celerem* 'be as fast as possible') or even by one derived from the same stem (Plaut. *Aul.* 314: *mortalem parce parcum praedicas* 'you are speaking of a real stingy man'). They further include such instances under pleonasm and *figura etymologica* respectively. On the other hand, from the perspective of a possible grammaticalization of manner adverbs as intensifiers, it is worth noting the opposite cases, where the literal meanings of the adverb and the modified adjective are in sharp contrast. For instance, while *egregius* or

eximius ‘excellent’ always have positive value (apart from ironic uses), the corresponding adverbs are not bound to modify adjectives expressing positive qualities:

(106) Rhet. Her. 3,35: *at si quid uidemus aut audimus* ***egregie*** *turpe aut honestum, inusitatum, magnum, incredibile, ridiculum, id diu meminisse consueuimus*
‘but if we see or hear something exceptionally base or honorable, extraordinary, great, incredible, ridiculous, we are likely to remember it for a long time’

(107) Apul. *met.* 8,17: *coloni … satis agentes rerum suarum* ***eximie****que trepidi*
‘the farmers, being quite worried about their possessions and extremely frightened’

Clashes like *egregie turpe* point to an advanced status in the “semantic bleaching” process which usually accompanies grammaticalization.

Derivationally built downgraders include *mediocriter* and *leuiter*, as in (108)–(109):

(108) Colum. 2,9,5: *si* ***mediocriter*** *cretosus uliginosusue ager est*
‘if the field is moderately chalky or marshy’

(109) Cic. *inv.* 2,154: *ille autem, qui in gladium incubuerat,* ***leuiter*** *saucius facile ex uulnere est recreatus*
‘the one who had fallen on his sword, being slightly hurt, easily recovered from his wound’

However, as admitted by Kühner & Stegmann (1955, 1: 794) – who cite instances like Cic. *Tusc*. 5,6: *impie ingratus*, Cic. *off.* 3,112: *acerbe seuerus*, Cic. *Att.* 11,10,2: *crudeliter inimici* – the use of manner adverbs as adjective modifiers clearly goes well beyond intensification. In the above examples, the adverb rather restricts or specifies the denotation of the adjective – much as a qualifying adjective does with a noun. Following Pinkster (1972: 53), who speaks of “qualification in the second degree”, *crudeliter inimici* could be paraphrased with something like ‘showing *crudelis inimicitia*’.

The paraphrase suggested by Pinkster occurs explicitly in the following passage by Tertullian: *irrationaliter bonus* = *bonus sine ratione*. Similar uses

are very widespread in Christian writers and provide a motivation for the great productivity of adverbs in *-aliter* and *-biliter* in that period (cf. Löfstedt 1967: 92–94).

(110) Tert. *adv. Marc.* 6,2: *nec ratio enim sine bonitate ratio est, nec bonitas sine ratione bonitas, nisi forte penes deum Marcionis **irrationaliter** bonum, sicut ostendimus*
'reason without goodness is not reason, and goodness without reason is not goodness – unless perhaps in Marcion's God, who, as I have shown, is irrationally good'

In other cases, the modifying adverb is not properly restrictive at the denotative level, but rather expresses an evaluation by the speaker/writer, quite like the sentence-oriented uses discussed in Section 4.3. Thus the function of *stolide* in (111) is very similar to that of a participant-oriented evaluative like *stulte* in (62):

(111) Liv. 7,10,5: *armant inde iuuenem aequales .... Armatum adornatumque aduersus Gallum **stolide** laetum et ... linguam etiam ab inrisu exserentem producunt*
'the friends then arm the young man. They take him, armed and equipped, in front of the Gaul who stupidly exulted and even stuck his tongue out in derision'

Writer's event-oriented evaluation (in the sense of Section 4.3.2), rather than intensification of a hardly gradable concept like truth, is relevant for the use of *incredibiliter* in (112) – if the adverb is not to be interpreted as a sentence modifier despite its syntactic embedding:

(112) Cic. *leg.* 2,33: *iam uero permultorum exemplorum et nostra est plena res publica, ... augurum praedictis multa **incredibiliter** uera cecidisse*
'furthermore (the history of) our Republic is full of a multitude of instances of incredibly true facts which happened, among those predicted by augurs'

Clearly, in many cases the evaluative content also has the side effect of intensifying the property involved, so that the two contributions could hardly be separated:

(113) Cic. *Verr.* II 4,148: *homo* ***ridicule*** *insanus*
'a man ridiculously foolish'

(114) Petron. 64,6: *catellam nigram atque* ***indecenter*** *pinguem*
'a black and obscenely obese female lap dog'

Intensification is out of the question when the modifying adverb does not convey manner meanings at all. The first type among the well-attested examples comes from modal adverbs. However, such instances are not very telling, since these adverbs also have focusing properties and therefore they can act on any kind of constituent. Moreover, this fact often yields serious difficulties in establishing unequivocally which constituent is actually modified in a given example, due to the obvious absence of intonational clues (Pinkster 1972: 57–58). The above examples, where the modal adverbs are embedded within a noun phrase, should in any event be syntactically uncontroversial:

(115) Cic. *fin.* 4,7: *res enim* ***fortasse*** *uerae,* ***certe*** *graues, non ita tractantur ut debent*
'assertions which are possibly true, surely important, are not treated as they should be'

Time and frequency adverbs are also attested as adjective modifiers, and obviously they keep their semantic value intact:

(116) Cic. *Brut.* 236: *[M. Piso] habuit a natura genus quoddam acuminis … quod erat in reprehendendis uerbis uersutum et sollers sed* ***saepe*** *stomachosum,* ***nonnumquam*** *frigidum,* ***interdum*** *etiam facetum*
'M. Piso possessed by nature a sort of shrewdness by which he showed himself to be ingenious and skilled in criticizing the use of terms, but often ill-tempered, not infrequently frigid, yet sometimes witty'

Finally, even adverbs derived from relational adjectives may modify adjectives, with no intensification involved, as in (117):

(117) Sen. *epist.* 100,10: *sit aliquid* ***oratorie*** *acre,* ***tragice*** *grande,* ***comice*** *exile*
'let's have (from Fabianus) something keen as in oratory, lofty as in tragedy, subtle as in comedy'

Coming back to purely syntactic facts, the position of the adverb as adjective modifier is remarkably rigid compared to the usual mobility of constituents in Latin: the adverb is overwhelmingly placed immediately before its head, as in all the examples above. Strict adjacency to the head, however, is not necessary, especially with specialized items like *tam, uix, multum* (cf. Hofmann & Szantyr 1965: 410). An instance[36] is (118):

(118) Liv. 2,20,8: *interque eos insignem ueste armisque Mamilium noscitans,* ***tanto*** *ui* ***maiore*** *... cum hostium duce proelium iniit*
'(T. Herminius), recognizing Mamilius among them from his arms and dressing, engaged in battle with the enemy commander with so much more violence'

Note that to get indisputable instances of discontinuity, only adjectives in attributive use should be considered. When they occur in nominal predicates, even a minimal pair like (119)–(120) could be discarded by referring *ualde* to the whole predicate.

(119) Cic. *epist.* 3,11,4: *prudentia litterarum tuarum* ***ualde*** *mihi est* ***grata***
'I am very grateful for the insight you show in your letter'

(120) Cic. *epist.* 6,11,2: *haec praedicatio tua mihi* ***ualde grata*** *est*
'this open praise by you is very gratifying to me'

Instances of postposed adverbs are also found, although quite rarely, and from the first century CE onward (Hofmann & Szantyr 1965: 410):

36. The example is from Löfstedt (1933: 397–402), who also discusses the possible links with similar nonadjacent positions of grade adverbs in medieval Romance languages.

(121) Sen. *epist.* 54,1: ***breuis*** *autem* ***ualde*** *et procellae similis est impetus*
'the attack (of asthma) is of very brief duration and similar to a storm'

(122) Plin. *epist.* 6,29,10: *tuitus sum Iulium Bassum, ut* ***incustoditum nimis*** *et incautum, ita minime malum*
'I defended Julius Bassus as having acted too indiscreetly and imprudently, but not at all with evil intentions'

(123) Apul. *met.* 11,24: *perfectis sollemnibus processi duodecim sacratus stolis, habitu quidem* ***religioso satis***
'after the ceremonies were completed, I came forth being consecrated by wearing twelve robes, clearly quite a holy attire'

5.2 Extensions to other modifiers' modifier uses

Since adverbs share with adjectives the feature of being modifiers, it is not surprising that the items presented in Section 5.1 can also modify other adverbs, without any relevant semantic difference. This is true not only for the specialized intensifiers like *multum*, *magis*, *paene*, *tam*, etc., but also for less grammaticalized adverbs. A few illustrations are provided:

(124) Cic. *de orat.* 1,205: *ea, quae* ***ualde breuiter*** *a te, Crasse, de ipsa arte percursa sunt*
'those concepts which have been touched on very briefly by you, Crassus, about the (rhetorical) art itself'

(125) Cic. *Att.* 14,18,1: *ego ad eum VIII Id. litteras dederam* ***bene mane***
'I dispatched a letter to him on the 8th early in the morning'

By the same token, intensifying adverbs and the like may modify a prepositional phrase, which is functionally not far from an adverb, when its semantics involves a notion of graduality:

(126) Cic. *de orat.* 2,259: *si ad te* ***bene ante lucem*** *uenisset*
'if he were to visit you well before daylight'

(127) Plin. *nat.* 18,175: *altum et graue solum etiam hieme moueri placet, tenue ualde et aridum* ***paulo ante sationem***
'it is the rule to stir up a deep and heavy soil even in the winter, but a very thin and dry one a little before sowing'

From a functional perspective, it is not really problematic that the same adverbs may also modify a noun, when it is used in a qualifying sense, as in (128)–(129):

(128) Plaut. *Pseud.* 135: *neque ego homines* ***magis asinos*** *numquam uidi*
'and I have never seen men more like asses'

(129) Cic. *Verr.* II 2,192: *at homo inertior, ignauior,* ***magis uir*** *inter mulieres, impura inter uiros muliercula proferri non potest*
'but a lazier man, a greater coward, a fellow who more than him plays the man among women and the corrupted contemptible woman among men, can never be produced'

In (129) it may be unclear which noun phrase is modified by *magis* (either *uir* alone or, more plausibly, the whole asyndetic phrase *uir … muliercula*). Neither solution, however, runs counter to the assumption that adverbs are nonnominal modifiers, since the noun phrase is clearly nonreferential: it is itself employed as a modifier, even a gradable one, as the coordination with the comparatives *inertior* and *ignauior* most explicitly shows. For such examples it is not necessary to speak of an attributive function of adverbs (as done in Kühner & Stegmann 1955, 1: 218–219): the adverb acts, as usual, as an attributive modifier.

It is a different matter in those instances where adverbs modify noun phrases used referentially. This behavior would indeed be incompatible with the prototypical definition of adverbs given in Section 1 above and should really be defined as "attributive use of adverbs". Some borderline cases involve time, space, and frequency adverbs. Frequency adverbs commonly modify nouns of temporary public charges; these nouns, however, normally occur as appositions and therefore they do not have full referential properties:

(130) Nep. *Hann.* 5,3: *M. Claudium Marcellum,* ***quinquies*** *consulem, apud Venusiam pari modo interfecit*
'in a similar manner (Hannibal) killed M. Claudium Marcellum, five times consul, near Venusia'

Two relatively clear instances[37] of a place and a time adverb in attributive use are given in (131)–(132):

(131) Liv. 25,9,3: *ne quis agrestium* ***procul*** *spectator agminis falleret*
'so that no farmer happening to observe the column from far away could escape being noticed'

(132) Liv. 36,14,9: *ueritus ne traderetur Philippo iam* ***pridem*** *hosti ...*
'fearing that he would be delivered to Philip, long his enemy ...'

Note, however, that in (131) *procul* modifies a deverbal noun, *spectator*, which keeps a strongly eventive meaning in the context (not far from *procul spectans agmen*), and in (132) *hosti,* as an appositive to *Philippo*, again has almost predicative value ('who was his enemy for a long time').

Clearer cases of modification of referential noun phrases come from the special subclass of focusing adverbs/particles. We will not deal with them here; as already mentioned above, such focusing properties, besides characterizing dedicated items like *etiam* 'also', *solum* 'only', *praesertim* 'especially', *quidem* 'really, indeed', extend to modal adverbs like *fortasse/forsitan* and *certe*. One instance involving both modal adverbs is (133):

(133) Apul. *met.* 8,16: *lupi,* ***forsitan*** *confertae iuuentutis strepitu uel* ***certe*** *nimia luce flammarum deterriti ...*
'the wolves, being frightened off perhaps by the noise from the crowded young people, or surely by the intense light of the flames'

37. Pinkster (1972: 60 n. 20) rightly points out that many instances reported in grammars may also be analyzed otherwise, referring the adverb to the predicate or the sentence, and discusses in particular Plaut. *Persa* 385 (*non tu nunc hominum mores uides*). Caution in interpreting these data is already expressed by Kühner & Stegmann (1955, 1: 220).

6. Adverbs as predications and as whole utterances

In many instances, adverbs occur in the absence of any explicit predicate they could modify. More interestingly, it is not uncommon that no predicate can be retrieved anaphorically from the preceding linguistic context. As Pinkster (1995: 325–326) stresses, in these cases the term "ellipsis", rather current in traditional grammars (cf. Hofmann & Szantyr 1965: 424; Kühner & Stegmann 1955, 2: 551–554) should be avoided. Functionally, we should assume that the adverb is not a modifer anymore but has acquired the force of a predication itself, fulfilling the role we are accustomed to assign to nouns and adjectives in nominal sentences.

These uses of adverbs are frequent in Ciceronian prose, both formal and informal. Most often, manner adverbs are interpreted by integrating predicates of saying, judging, and the like. As will be seen from the instances below, they can introduce or comment on a direct discourse, as in (134) and (135), but not necessarily. They can occur with explicit subject, preposed in (134), postposed in (135), or interposed in (136), but also alone with unexpressed subject, as in (137)–(138). They are not limited to main clauses, as (137) shows.

(134) Cic. *nat. deor.* 2,65: *Euripides autem ut multa* ***praeclare*** *sic hoc* ***breuiter***
'Euripides, however, splendid in many passages, is concise in this one'

(135) Cic. *de orat.* 2,249: *'quid hoc Nauio ignauius?'* ***seuere*** *Scipio; at in male olentem 'uideo me a te circumueniri'* ***subridicule*** *Philippus*
'Scipio said seriously, "Is there a lazier knave than this Navius?" but Philippus (said) a bit humorously, "I see I am surrounded by you" to someone who was stinking'

(136) Cic. *Lael.* 8: ***recte*** *tu quidem Scaeuola et* ***uere***
'you are speaking rightly, Scaevola, and saying the truth'

(137) Sen. *benef.* 4,40,5: *et,* ***ut breuiter***, *qui nimis cupit soluere, inuitus debet; qui inuitus debet, ingratus est*
'and, to put it briefly, one who is too eager to pay his debt is unwilling to be indebted, and one who is unwilling to be indebted is ungrateful'

In cases like (138), it must be left open whether the sentence is about saying or acting, as the adverb *iracunde* combines with both:

(138) Plaut. *Men.* 695–697: *aliam posthac inuenito quam habeas frustratui. / :: Nimis **iracunde** hercle tandem. heus tu, tibi dico, mane, / redi!*
‘from now on, find somebody else to make a fool of! **::** By Hercules, really you’re too hot-tempered! Hey you, I’m speaking to you, wait! Come back!’

An interpretation in terms of action predicates is the only possibility in the following passage, which involves several manner adverbs, together with the predicative adjective *nefarius* and the “quasi-adverbial” nominal ablative *iure* in a fully parallel function. The example also shows how extensively this discourse strategy can be applied.

(139) Cic. *Att.* 9,10,3: *mihi autem haeserunt illa: **male** Tarquinius qui Porsennam, qui Octauium Mamilium contra patriam, **impie** Coriolanus ⟨qui⟩ auxilium peti⟨i⟩t a Volscis, **recte** Themistocles qui mori maluit, **nefarius** Hippias, Pisistrati filius, qui in Marathonia pugna cecidit arma contra patriam ferens. at Sulla, at Marius, at Cinna **recte**. immo **iure** fortasse ...*
‘for myself I could not forget certain precedents. Tarquinius, who stirred up Porsenna and Octavius Mamilius against his country, did wrong; Coriolanus, who sought help from the Volsci, committed an impiety; Themistocles was right in preferring to die; Hippias, the son of Pisistratus, who fell in the battle of Marathon in arms against his country, was a villain. “But Sulla, Marius, Cinna acted rightly”. Legally, perhaps’

Direction adverbs are naturally interpreted as motion predicates, as in (140), but they often occur with reference to textual space, where they may be also be considered predicates of saying, as in (141).

(140) Cic. *fin.* 3,8: *quid tu, inquit, **huc**?*
‘“why have you come here?” said he’

(141) Plin. *nat.* 16,92: *et de foliis **hactenus***
‘and so much on the subject of leaves’

Adverbs are also found in sentences without overt copula. This is not unexpected, as they also occur in explicit copulative constructions (Section 3.2.2, (45)–(47)). An instance with textual reference is:

(142) Cic. *Att.* 6,9,1: *qua re de hoc* ***satis***
'so enough about that'

The analysis in terms of copula-less sentences also seems adequate in the following examples, where the argument is given by a completive clause introduced by *quam*. The comparison between (143) and (144) shows the functional identity of the adverb *mire* with the more common adjective *mirum* in this context.[38]

(143) Cic. *Att.* 1,11,3: ***mire quam*** *illius loci non modo usus sed etiam cogitatio delectat*
'it is extraordinary how [lit. extraordinarily, how] the very thought of the place, let alone the use of it, gives me pleasure'

(144) Cic. *Att.* 13,40,2: ***mirum quam*** *inimicus ibat, ut ego obiurgarem*
'it is extraordinary, with how much hostility he went off, so that I reproached him'

Sentence adverbs too can be found as predicates in verbless sentences. For instance, the setting adverb *alias* occurs alone with temporal-textual reference in (145). Example (146) is more perplexing, since it involves *opportune* in an evaluative sense, contrary to the expectation that "interpersonal" adverbs should not be focused (cf. Bolkestein 1993: 86).

(145) Cic. *Tusc.* 1,70: *sed* ***alias***, *ubi sit animus*
'but we will discuss on another occasion, where the soul is'

38. For another occurrence of *mire quam* in this sense, cf. Gell. 9,9,4: *animaduertimus reliquisse Vergilium quod Graecum quidem mire quam suaue est*, 'we realized that Vergil had omitted something that in Greek, to be sure, it's wonderful how much it is pleasing'. Other interpretations (with *quam* taken as postposed intensifier of *mire*) are possible, however. One could also compare the Late Latin construction *uere/sane quia* (parallel to Fr. *heureusement que* ...) discussed in Löfstedt (1933: 268), with examples from *Itinerarium Egeriae* and Gregory of Tours, but attested also in more "Classical" authors (Aug. *in psalm.* 58,2,9: *uere quia tu es Deus meus*).

(146) Ter. *Andr.* 345: *o Pamphile, te ipsum quaero. eugae, Charine! ambo* ***opportune****: uos uolo*
'o, Pamphilus! I'm looking just for you. Wow, Charinus! How convenient that both of you are here: you two I want'

Adverbs expressing subjective modality, which as expected do not occur as predicates, may however occur as autonomous utterances, in dialogues, and/or as answers to a yes/no question (cf. Pinkster 1972: 99).

(147) Ter. *Haut.* 775–777: *Quam ob rem istuc, Syre? nam prorsum nil intellego.* **::** *Vah tardus es.* **::** ***Fortasse****.*
'But why, Syrus? I do not understand at all **::** Gee you're slow! **::** Maybe'

(148) Cic. *Tusc.* 5,35: *miser ergo Archelaus?* ***Certe****, si iniustus*
'Archelaus is therefore wretched? Certainly, if he is unjust'

7. The adverb phrase

The complexity of the external syntax (and semantics) of adverbs illustrated in Sections 3–6 is not matched by a similar complexity within the adverb phrase. Few elements can modify the adverbial head, essentially other adverbs (already mentioned in Section 5.2) and focus particles. Moreover, some adverbs may govern arguments (see Section 7.2). At an intermediate level between external and internal syntactic properties of adverbs, their behavior in coordinate structures is considered in Section 7.1.

7.1 Adverbs and coordination

Issues regarding coordination of adverbs are of two kinds: (i) under what conditions adverbs with different functions and/or semantics may be coordinated, and (ii) under what conditions adverbs may be coordinated with other kinds of constituents. For reasons of space, we cannot go beyond a sketchy illustration of either question.

7.1.1 Coordination within adverbs

As widely illustrated so far, adverbs modify predication and sentences at different semantic and syntactic levels. Dealing with a dead language, coordination should provide one of the better tests available to ascertain in an objective way which adverbs perform the same kind of modification. Thus we expect that manner adverbs can be freely coordinated with each other, and indeed it is so, as in (8) in Section 3.1.1. Conversely, adverbs occurring in juxtaposition should either belong to quite different layers (e.g., predicate vs. sentence adverbs; within predicate adverbs, arguments vs. non-nuclear modifiers; within sentence adverbs, modal vs. setting adverbs, and so on); or at least they should neatly differ in their semantic contribution. This way of reasoning has been already applied, more or less implicitly, in several instances discussed in Sections 3–4. However, coordination tests are not without problems: several of them are extensively discussed by Pinkster (1972: 108–133), with reference to Latin manner adverbs.

Apart from instances of quite artificial coordinations traditionally falling under the labels of zeugma or hendiadys, a more delicate problem Pinkster points to is illustrated by equivalents of the English sentence *John went home and in a hurry*, where the second member is pragmatically marked – either as an afterthought or as a most salient bit of information – and is often also given a special intonation. In such cases most restrictions on coordination are suspended, and the same holds presumably for Latin. This almost certainly explains the (pseudo-)coordination of *nunc* and *male* in (149):

(149) Plaut. *Truc.* 357: *vah, uapulo hercle ego* ***nunc***, ***atque*** *adeo* ***male***
‘oh, by Hercules! I’m in for a beating now, and a bad one, too!’

Clearly, with a dead language we have many fewer clues for establishing whether a given occurrence can be safely considered an instance of improper coordination and therefore become irrelevant for the identification of adverb classes.

The reliability of coordination tests is also seriously challenged when a few adverbs may occur both coordinated and juxtaposed, or when an adverb may be coordinated, without relevant semantic differences, with items belonging to apparently incompatible subclasses. Pinkster (1972: 129–131) has conveniently illustrated this issue with the case of *saepe,* which is found both

juxtaposed and coordinated with adverbs of manner; on the other hand, it may be coordinated also, as expected, with frequency adverbs and, perhaps less intuitively, with the quantity adverb *multum* and with the duration adverb *diu* (examples in Pinkster 1972).

The solution offered is that *saepe* should be "assigned to several subclasses as far as *its* syntactic characteristics are concerned" (Pinkster 1972: 131). This, however, may risk an explosion of distinctions within single lexemes, not matched by any visible semantic contrast. It seems better to keep *saepe* in one subclass, namely that of frequency adverbs, and explain its apparently contradictory behavior with respect to manner adverbs by the fact that it can act both at sentence and predicate level (the distinction between internal and external quantification was mentioned in Section 4.2.2).

In this perspective, coordination and juxtapositon are not synonymous, not because *saepe* has different meanings, but because of differences in scope. When *saepe* is coordinated with a predicate adverb, the latter is outside its scope, and therefore it qualifies all possible instances of the habitual predication. In (150), it cannot be the case that Cicero had sometimes been reproached only lightly:

(150) Cic. *Att.* 3,10,2: *nam quod me tam* ***saepe*** *et tam* ***uehementer*** *obiurgas . . .*
'indeed since you reproach me so often and so energetically'

On the other hand, when the two adverbs are juxtaposed, the manner adverb is within the scope of *saepe*, and therefore there is an implicature that it does not qualify some other instances of the quantified event. This is unlikely to be made explicit in real texts, of course, but (151) seems to be a case in point (although it is not found in all codices):

(151) Rhet. Her. 3,15: *non necesse esse nos omnes has partes in laudem aut in uituperationem transferre, propterea quod saepe* ⟨*ne*⟩ *incidunt* ⟨*quidem,* ***saepe*** *ita* ***tenuiter*** *incidunt,*⟩ *ut non sint necessaria dictu*
'(that) we need not use all these parts for praise or censure, because often not all of them even apply, and often, too, they apply so slightly that it is not necessary to mention them'

Note that in (151) the meaning of *saepe* has to be somehow weaker than ‘often’ (at least from a logical point of view), since its two occurrences refer to two disjunct sets of events.

As a matter of fact, the ability of *saepe* to be coordinated with manner adverbs is not idiosyncratic, being shared by other time quantifiers. An instance with *raro* and another with a denumeral quantifier are given below:

(152) Tac. *dial.* 41,4: *quid uoluntariis accusationibus, cum* ***tam raro et tam parce*** *peccetur?*
‘what is the use of taking a prosecution on one’s own shoulders when crimes are committed so rarely and so irrelevantly?’

(153) Cels. 3,23,6: *post ambulationem loco tepido* ***uehementer et diu, ac non minus ducenties****, nisi infirmus erit, perfricetur*
‘after the walk he should be rubbed vigorously and for a long while, in a warm place, and not less than two hundred times, unless he is weak’

7.1.2 Coordination between adverbs and other constituents

It is well known that the conditions for coordination cannot be expressed in purely categorial terms: categorial identity is neither a sufficient nor a necessary condition for coordination (Pinkster 1990: 9; Torrego, this work, vol. 1). Concerning adverbs, the latter point implies that one can expect to find coordination of manner adverbs with other phrases, provided that they are semantically similar and can be governed by the same predicates.

The best candidates are noun phrases in the ablative and various kinds of prepositional phrases. As for bare nouns in the ablative, some even approach the status of adverbial lexemes, like *casu* ‘accidentally’, *ioco* ‘jokingly’, *iure* ‘according to the law’, *ordine* ‘in due fashion’, *ritu* ‘according to the custom’ (Hofmann & Szantyr 1965: 117, Pinkster 1972: 126), and of course they are easily coordinated with adverbs proper: see for instance the collocation found in Sall. *Catil.* 51,4; Cic. *Quinct*. 28, *Phil*. 3,38; Liv. 30,17,12 passim: *recte atque ordine facere* ‘do rightly and properly’. Sequences Adjective + Noun in the ablative may also be coordinated with adverbs, especially the quasi-periphrastic constructions Adjective + *modo, mente, animo*:

some examples are given in Section 8. Finally, a few instances of coordination between adverbs and semantically compatible prepositional phrases are given in (154)–(155):

(154) Ter. *Eun.* 175: *utinam istuc uerbum* ***ex animo ac uere*** *diceres*
'if only you spoke that sentence truthfully and from the bottom of your heart'

(155) Colum. 2,4,3: *ea si* ***aequaliter ac sine offensatione*** *penetrauit, manifestum est totum solum deinceps esse motum*
'if (the pole) has gone in to a uniform depth and without striking anything, it is clear that all the ground has been stirred in turn'

A further possibility is given by coordination with predicative adjectives or participles (cf. Kühner & Stegmann 1955, 1: 238), although the full semantic identity between the two constructions is questionable (Pinkster 1983: 201–205):

(156) Cic. *off.* 1,136: *ad hoc genus castigandi* ***raro inuitique*** *ueniemus*
'but we'll have recourse to this sort of reproof rarely and reluctantly'

(157) Liv. 2,30,12: ***effusi et contemptim*** *pugnam iniere*
'(the Volsci) came into battle in loose array and fearlessly'

(158) Sen. *epist.* 2,2: *omnia* ***cursim et properantes*** *transmittunt*
'they pass over everything hastily and in a hurry'

More intriguing cases of coordinations involving adverbs can be found, however. For instance, an adverb may be coordinated with the object of a verb of saying (a case considered puzzling by Pinkster 1990: 9–10):

(159) Plaut. *Capt.* 960: ***recte et uera*** *loquere*
'speak honestly and tell the truth'

(160) Liv. 23,24,3: *dictator de se* ***pauca ac modice*** *locutus*
'the dictator spoke briefly and modestly about himself'

In (161), the syntactic clash is still more striking, since *saepe* cannot possibly be an argument and *maximas* is embedded within the object:

(161) Cic. *Att.* 3,5,1: *Terentia tibi* ***et saepe et maximas*** *agit gratias*
'Terentia tells me continually how very thankful she is to you'

7.2 Adverbs, argument structure, and the adverb–preposition continuum

As is well known, the notion of argument structure is not exclusive to verbs, but extends to other lexical categories as well: in phrases like *proud of himself* or *Caesar's destruction of the city*, the adjectival and the nominal heads are said to take argument complements (although the criterion of indispensability is generally more difficult to apply to nonverb arguments). Many nouns and adjectives with arguments – but not all – are deverbal derivatives, and their argument structure can be described as "inherited" from its verbal base: this is the case for *destruction* above. Concerning adverbs, therefore, two questions arise: (i) Can adverbs have an argument structure on their own? (ii) Are adverbs derived from argumental adjectives/nouns able to inherit the argument structure of their base?

Question (i) can certainly be answered positively for Latin for several nonderived adverbs. Some govern prepositional phrases, like *procul ab* 'far from', *una/simul cum* 'together with'. Others take noun phrases in different cases as arguments: for instance *obuiam* governs the dative in Caes. *Gall.* 7,12,1: *obuiam Caesari proficiscitur*, and *postridie* can be followed by noun phrases both in the genitive (in the frozen phrase seen in Cato *agr.* 2,1, Cic. *epist.* 3,8,10, Caes. *Gall.* 2,12,1 passim: *postridie eius diei* 'the day following that day') and the accusative (Cic. *Att.* 16,4,1: *postridie ludos Apollinaris* 'on the day following the games of Apollo').

However, while the instances of adverbs taking prepositional phrases as arguments are relatively straightforward, the concept of case-governing adverbs is inherently problematic, since it is by no means clear by what kind of criteria they can then be neatly separated from prepositions.

The traditional synchronic criterion for distinguishing adverbs from prepositions in a language like Latin is indeed that the latter do not occur independently without case forms (this is also accepted in Pinkster 1972: 145). Clearly, there are several uninflected words in Latin which may govern a case form but do not necessarily do so: in particular, a series of items expressing spatial relations, like *intra*, *infra, extra*, *ultra*, *circa*, *citra*, *contra, iuxta, propter.* Either these intermediate cases, as Pinkster (1972: 147) remarks, are put into a special subclass, or we have to say that they belong to both word classes. In practice, the latter approach has usually been followed. The intermediate nature of words like *intra* is made clearer in the diachronic per-

spective, as these words can be seen as being in a transition stage along a grammaticalization cline (cf. Lehmann 1995: 88–89).[39] Diachronically, the direction of the process – from lexicon to grammar – is shown by a few items whose prepositional use appears from some period onward: for instance, *subtus* 'under' (first in Vitr. 4,2,5 *subtus cantherios* and then in the Itala and later, Hofmann & Szantyr 1965: 280) or *foras* 'outside of' (Vulg. *lev*. 16,27: *asportabunt foras castra*, cf. *ThLL* s.v.).

Unfortunately, the procedure outlined above has one undesirable consequence: within this approach, there is no room left for adverbs taking noun phrases as arguments. All lexemes like *obuiam* or *postridie*, when directly followed by nominal case forms, would necessarily be labeled prepositions. As is shown below, this seems quite counterintuitive in many cases, when the item in question appears to have a plainly lexical content, not being involved at all in any grammaticalization cline.

A possible weakening of the criterion could profit from the fact that the fully grammaticalized Latin prepositions (*ad*, *in*, *ex, de*, etc.) only govern two cases, namely accusative and/or ablative. It could be suggested that only items governing these cases – *intra* and the like – have to be labeled prepositions, while a word like *obuiam* may still be considered an adverb with argument structure. As a matter of fact, this choice seems to prevail in Latin lexicography and also in grammars: all items listed in Hofmann & Szantyr (1965: 214–285) as prepositions govern the accusative and/or the ablative. However, this is not always a confortable way out, since it would imply that *postridie* is an adverb in *postridie eius diei* and a preposition in *postridie ludos*, which is far from satisfying.[40]

Further good reasons to save the notion of a case-governing adverb as distinct from a preposition may come from the morphological structure of the items involved. To illustrate this point, we may discuss the case of *prope*

39. This cline may often start well before the adverb stage, when the latter comes from a relational noun (Hopper and Traugott 1993: 106–108) or from univerbation of a prepositional phrase. Cf. the above mentioned instances of *obuiam* < *ob uiam* and *postridie* < *posterī* (an old Locative, Leumann 1977: 426) *die*.

40. Tellingly, the *ThLL* article on *postridie* (1982) more convincingly groups all kinds of syntactic government under *adv.*, but adds the commentary "sc. vice praepositionis" to the case of accusative government only.

'near' and morphologically related words in some detail. *Prope* is met in the following constructions: (i) without any governed noun phrase: Suet. *Tit.* 2,1: *prope astabat*; (ii) followed by *ab*: Cic. *Pis.* 26: *prope a meis aedibus*; (iii) with accusative: Caes. *Gall.* 1,22,3: *prope hostium castra*. According to Hofmann & Szantyr's and Pinkster's approach as outlined above, (i) requires *prope* to be labeled an adverb and (ii) an adverb with argument structure, while (iii) should point to its prepositional status.

However, *prope* is paradigmatically related to a comparative *propius* and an (irregular) superlative *proxime*. Both are found in construction (iii), namely with accusative: Caes. *Gall.* 4,28,2: *propius solis occasum*, Liv. 24,48,11: *proxime morem Romanum*. Consequently, in Hofmann & Szantyr (1965: 245), *propius* and *proxime* are listed – without special comment – among prepositions governing accusative case (the same happens in the recent *ThLL* article). This is problematic for a preposition, since we do not expect grammatical words to inflect for grade. Moreover, Hofmann & Szantyr's choice looks even less attractive if one considers the adjective *proximus*, which also may govern the accusative (Liv. 29,7,6: *qui proximus eum ... steterat*). The obvious derivational link between *proxime* and its base adjective again conflicts with its being considered a preposition, since it is generally not accepted that synchronically productive derivation may have grammatical words as outputs. This should force us, in my opinion, to consider *proxime* an adverb, regardless of the construction in which it occurs, which seriously undermines the possibility of taking accusative case government to be a sufficient condition for preposition status.

The above discussion of *proxime* leads us to the second question posed at the beginning of this section: namely, to what extent can derived adverbs inherit the argument structure of their bases? The issue is not easily settled even in English or Romance languages: for instance, in Italian it is perfectly possible to say *analogamente a* 'analogously to' but hardly ever ??*utilmente a* 'usefully to' and definitely not **degnamente di* 'worthily of'. In Latin, with the kind of evidence at our disposal, it would make little sense to venture quantitative estimates. It can be safely said, however, that at least some derived adverbs do exhibit argument structure, without being relatable to prepositions at all.

A tricky case is that of *longe*. This adverb surely displays argument structure: Plaut. *Most.* 390 = (37) above: *longe ab aedibus*, Cic. *Verr.* II 2,86: *longe*

ab oppido antiquo, etc. However, its ability to govern a prepositional phrase is not obviously inherited from *longus.* Instances of *longus ab* meaning 'far from' are poetic or late (see *ThLL* s.v.), so they could well be analogically modeled on *longe*, like back-formations in morphology.

A better case is given by *utiliter*, which, like its base adjective, may govern a prepositional phrase introduced by *ad*. See, for instance, (162) (another occurrence in Cic. *off.* 2,17, and even one of *inutiliter ad* in Cic. *top.* 30):

(162) Cic. *orat.* 228: *ut quicquid in his rebus fiat* ***utiliter ad pugnam*** *idem ad aspectum etiam sit uenustum*
'so that whatever in these matters (gladiators' moves) is made in a way useful for the combat is also attractive to look at'

The construction *utiliter* + dative is also attested, at least in poetry:

(163) Ov. *met.* 15,451–452: *laetor / ...* ***utiliter Phrygibus*** *uicisse Pelasgos*
'I rejoice that the Greeks won to the profit of the Phrygians'

Other instances of adverbs which govern different arguments inherited from their base adjectives (including bare case forms) are *conuenienter* 'in accordance with' (with dative: Cic. *fin.* 4,41: *conuenienter naturae uiuere*, and with *cum*: Cic. *Tusc.* 5,82: *cumque ea conuenienter uiuere*); and *similiter* 'in a way similar to' (with dative: Liv. 37,40,10: *similiter his armati*, and with *atque*/*ac*: Quint. *inst.* 3,7,26: *laudantur autem urbes similiter atque homines*).

The ablative case, too, is not excluded from governance by lexical adverbs. A case in point is *digne*. Classically, the construction is found only with the comparative, but in later instances the positive grade also occurs:

(164) Hor. *sat.* 2,7,47: *peccat uter nostrum* ***cruce dignius****?*
'which of us sins in a way more deserving of the cross?'

(165) Tert. *adv. Marc.* 2,6: *fortius commendem et ita institutum et* ***digne deo*** *institutum*
'I shall strenghten my claim both that (man) was so constituted (i.e., having free choice) and that such a constitution was to God's credit'

To conclude, Pinkster's (1972: 152) statement that "the synchronic relationship of adverbs and prepositions is not problematic .... Prepositions are always constructed with case forms" seems quite optimistic. The point is not that prepositions are always constructed with case forms, but that several items which one would like to call adverbs and not prepositions (due to their lexical content and/or their being transparently derived from adjectives) can also govern bare noun phrases. Adverbs are capable of having an argument structure without necessarily entering a grammaticalization path.

8. From Latin to Romance: The grammaticalization of *-mente*

Latin adverb formation, with the two main strategies of *-ē* and *-iter* deadjectival suffixation and the various less relevant procedures listed in Section 2.2, appears to have remained a productive process throughout the history of the language. In particular, new formations in *-iter* from derived adjectives in *-bilis/-alis* are very common in Late Latin (Löfstedt 1967: 92–94), and some influential Christian writers, like Augustine, are particularly fond of them (Cupaiuolo 1967: 46–47). The productivity of the *-iter* suffix fully extends into Medieval Latin as well (Stotz 2000: 374–375). However, curiously enough, neither *-ē* nor *-iter* survived at all into Romance as productive processes, and they even left very few remnants in terms of inherited, unanalyzable words (Lausberg 1962 [1971: 91–92]).

As is well known, a new derivational suffix, *-ment(e)*, expanded throughout Western Romania (though not in Rumania), and its derivatives came to cover all the diverse functions performed by Latin adverbs that we have dealt with in the sections above. The origin of *-ment(e)* is no mystery. The starting point is found in ablative noun phrases of the type *deuotā mente* 'with devoted mind/soul'; to become a general adverb-forming suffix *mente* had to undergo a process of semantic bleaching (since *mens* in its lexical meaning could combine only with adjectives referring to psychological qualities of animate beings), which is normal in grammaticalization processes. Indeed, Romance adverbs are often taken in manuals as a paramount instance of grammaticalization (see for instance Hopper and Traugott 1993: 130–131). However, there are some points in this development which are less straightforward than expected.

First, while the above outlined grammaticalization process is commonplace across languages,[41] within the history of Romance derivation the case is more or less an *unicum*. The rich derivational morphology of Romance languages comes overwhelmingly from already existing Latin affixes, often with multiple splitting in form and substantial semantic evolutions.[42] New entries are mostly learned borrowings from Latin itself, which may win the competition with the popularly inherited variants (as It. *-bile* with respect to the etymologically identical -(*e*)*vole*).

Second, *-mente* adverbs are not so widespread within Western Romania as might be inferred by their ubiquity in major standard languages: a productive rule of *-mente* formations is indeed absent in many Romance varieties without official status, such as Sardinian[43] and many "dialects" of Italy (not only in the south). In these varieties the only autochtonous adverbialization strategy appears to be conversion from adjectives.

There is no full agreement about the relevance of the above points to evaluating the grammaticalization process in question. In his monograph, Karlsson (1981: 133) strongly supports the view that "-MENTE adverbs are an early, vernacular development, with its roots buried in Classical Latin, … its rise to be placed in Late Latin, and its completion in the spoken vernacular evident beginning with the Eighth-Century Reichenau Glosses (*solamente* 'only')". Other authors are less convinced of the absence of cultural-learned mediation in the process. Hummel (2000: 461–470) sees conversions from adjectives as the truly vernacular substitute for Latin adverbs (at least as predicate modifiers) and does not completely rule out Gasca Queirazza's (1971) claim that the meaningful contrast of *mens* with *corpus* and *animus* in liturgical Latin

41. Well-traceable examples of similarly built derivational affixes abound for instance in Germanic languages, e.g. Eng. *-ly*, *-ful*, *-less*, Ger. *-heit*, *-weise*, *-mal* and similarly in cognate languages.
42. As a single instance, one could mention the host of nominal suffixes traceable back to Lat. *-arius-/arium* which entered Italian productive morphology via different paths: direct transmission from different varieties (*-aio*, *-aro*); learned transmission (*-ario*); borrowing from French (*-iere*, *-iero*).
43. Apparently, current Sardinian does not have *-mente* adverbs (apart from a few borrowings from Italian, cf. Blasco Ferrer 1986: 171). Karlsson (1981: 128), however, cites some Old Sardinian examples.

played a relevant role in the expansion of *mente* collocations starting from learned language registers.

From the Latin perspective, which is our concern here, it is puzzling that the periphrasis with *-mente* does not seem to increase substantially in later and less literary sources (cf. Löfstedt 1967: 96). Moreover, the semantic bleaching process does not appear to advance much along Latin documented history. Paradoxically, from the semantic point of view one of the more adverb-like attestations is the earliest one, in a fragment of Ennius (if we accept the reading 'unexpectedly' suggested by Rosén 1999: 57; in the Loeb translation 'with misguided mind' there is little semantic shift):

(166) Enn. *trag.* 270: *ille **trauersa mente** mihi hodie tradidit repagula, quibus ego iram omnem recludam*
'he unexpectedly offered me today the keys with which I will free all my fury'

In his thorough investigation, Karlsson (1981: 135–143) found about a hundred instances in Classical Latin of an adjective immediately followed by *mente*. Many of the clearest ones occur in poetry, but some also in prose (Cic. *div.* 2,149,10: *quieta mente consistere*, *dom.* 139,6 *constantissima mente … dedicauit*; Liv. 10,29,2 *alienata mente … iactare*). In (167), the phrase – although interrupted by *tamen* – is coordinated with a manner adverb:

(167) Curt. 8,3,7: *at illa purgare se, quod, quae utilia esse censebat, **muliebriter** forsitan, sed **fida** tamen **mente** suasisset*
'but she excused herself for having advised what she thought expedient, perhaps with feminine weakness, but yet in a loyal spirit'

Only a few of the Classical Latin examples, however, require an interpretation of *mente* slightly beyond its usual lexical value of 'state of mind, attitude': possibly cases like Ov. *ars* 1,602: *tacita mente praecare*, or Sil. 6,469: *iurata mente* 'under oath' may be mentioned. On the other hand, Karlsson (1981: 46–47) notes a significant meaning difference in the adjectives occurring with *mente* in Christian writers, which are often connected with religious vocabulary (*deuota*, *pura*, *pia*, *fideli mente*, etc.) and might have exerted a stronger influence on the univerbation of *mente* phrases due to their presumably frequent repetition in oral devotional formulae. The other semantic standpoint suggested by Karlsson is the collocation *tota mente*, the only

one equally well attested in Classical and Christian periods, and quite a suitable one to favor the semantic bleaching process of *mente*, since *totus* is not constrained at all to qualify mental states (notice, however, that *tota mente* does not have direct continuations in Romance). The shift to a more general meaning 'fully, totally' would be already conceivable in an instance like (168):

(168) Sen. *nat.* 7,1,1: *nemo usque eo tardus et hebes et demissus in terram est ut ad diuina non erigatur ac* ***tota mente*** *consurgat*
'no one is so slow and dull and stooping to the earth that he does not stand up and rise with his whole mind toward the divine things'

From the point of view of Latin, *mente* had to face strong competitors as a candidate for an adverbializing suffix. Among the several nouns with general meaning which were often coupled with adjectives in the ablative, *modo* is perhaps the most widely attested, and *opere* gave rise in Latin itself to an array of quantity adverbs (*magnopere*, *tantopere*, *nimiopere*, etc.). Among nouns related to human psychological states, *animo* was at least as frequent as *mente* in such quasi-periphrastic uses. Occurences are found where these noun phrases are coordinated with adverbs, as in (169)–(170):

(169) Cic. *Att.* 12,4,2: *non adsequor ut scribam quod tui conuiuae non modo* ***libenter*** *sed etiam* ***aequo animo*** *legere possint*
'I cannot work anything out which your fellow guests would read with equanimity, let alone enjoyment'

(170) Cic. *de orat.* 2,127: *a te* ***nouo quodam modo praeclareque*** *dicuntur*
'they are discussed by you in a certain original way, and brilliantly'.

Modo especially is found with different kinds of adjectives, including relational ones as in (171):

(171) Plin. *nat.* 4,30: *omnes* ***theatrali modo*** *inflexi*
'all (mountains) curved like a theater'

Lausberg (1962 [1971: 94]) stresses the fact that *mente* had a phonological advantage with respect to *mŏdō*. In a grammaticalization process, the latter would have resulted in an unstressed suffix, while *-mente,* with its heavy

penultimate syllable, could keep its stress and so conform to the general Romance preference for stressed suffixes in derivation. Lack of stress could also be a motivation for the disappearance of *-iter* in the spoken language, which sharply contrasts with its extreme vitality in written sources throughout Medieval Latin.[44]

At any rate, Latin written sources do not allow us to follow the grammaticalization process of *-mente* in full detail, since, in Karlsson's (1981: 44) words, "in no Latin author and at no time did *mente* replace to any significant degree the traditional Latin adverbial suffixes".

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44. Karlsson (1981: 44–45) suggests that a remnant of *-iter* could have survived in those regions of Romania where the adverbial suffix turned up as *-mientre* (Old Spanish) or *-menter/-mentre* (Old Venetian, Friulian, Rhaeto-Romance). The presence of *-r* in such forms is explained by a stage *-MENTER resulting from the fusion between *-mente* and *-iter*, possibly favored by the *-enter* ending of *prudenter* et sim.

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Elisabetta Magni

Mood and Modality

1. Introduction

1.1 Basic distinctions

The term *modality* designates a wide conceptual domain whose functions have been investigated both in work on logic and in work on linguistics. From a linguistic point of view, modality affects all areas of the grammar, interacting with other categories such as negation, tense, and aspect. Modality, tense, and aspect are categories of the clause that are generally (but not always) marked within the verbal complex and, in notional terms, are related to the event that is reported by the utterance: tense and aspect are concerned respectively with the time and the nature of the event;[1] modality "is concerned with the status of the proposition that describes the event" (Palmer 2001: 1).[2]

The foregoing implies that modal functions do not relate to the verb alone or even primarily, but to the whole sentence. Consequently, it is often very difficult to decide what to include and what to exclude from a study of modality. Indeed, various ideas and notions have been considered for the identification and delimitation of modality: attitudes and opinions of the speaker, subjec-

1. More precisely, aspect is seen in terms of its "internal temporal constituency" (Comrie 1976: 3). According to Chung and Timberlake (1985: 256), "Mood is a semantic operation analogous to tense-aspect, although it differs in that it deals with events and worlds rather than with events and time".
2. Although published as a "second edition" and with the same title, Palmer (2001) largely differs in fact from Palmer (1986) by offering a completely different organization of the subject, by introducing new concepts and terminology, and by presenting more detailed discussions and abundant data on typological issues. For Timberlake (2007: 284), these categories "have to do with the distribution of situations over occasions (tense and aspect) and a space of alternatives (modality)".

tivity, factuality, speech acts, and, more recently, a group of concepts that include possibility, necessity, permission, obligation, ability, and volition.

Although there is little agreement on exactly how to define modality, it is a widely held view among linguists that subjectivity is an essential criterion, and modality is often defined as the grammaticalization of speaker's attitudes and opinions (Lyons 1977, 2: 452, Palmer 1986: 16).

Under this interpretation, if we also accept the view that modality relates to the status of the proposition that describes the event, we can assume that speaker's attitudes and opinions may concern either the proposition or the event. This lends support to the idea that a primary distinction may be made between *propositional modality* and *event modality* (Palmer 2001: 7–8). These basic modality types include two fundamental subtypes: *epistemic* and *deontic*. This divide is fairly standard, as is our use of the terms, which are taken from modal logic.

Admittedly, a close relationship exists between certain types of linguistic modalities and modal notions, as defined in logic. According to Kiefer (1994: 2515), "The essence of 'modality' consists in the relativization of the validity of sentence meanings to a set of possible worlds". This definition not only covers most of what linguists usually consider part of the domain of modality, but it also includes the logical modalities.

The central notions of traditional modal logic are *possibility* and *necessity* (Lyons 1977, 2: 787), which are assumed to be the core of modality in many recent works on linguistics as well (e.g., van der Auwera and Plungian 1998, Traugott and Dasher 2002, and, on Latin, Bolkestein 1980, Núñez 1991).[3]

Lyons (1977, 2: 794) also introduced into the discussion of modality the notion of factuality: nonfactuality and irreality are clearly associated with subjectivity and are often handled as contrasting with their opposite in a set of binary distinctions. Contrasts such as factual/nonfactual, real/unreal, true/untrue, and particularly assertion/nonassertion, have recently been subsumed under the broader distinction between *realis* and *irrealis*, which is better ac-

3. As Palmer points out in considering evidential systems, however, "It is probable that the epistemic/deontic *cum* possibility/necessity systems of modality are by no means universal, and it may be argued that the logicians' preoccupation with them is a reflection of the linguistic systems of only some of the languages of the world, especially those of Europe" (1986: 20).

counted for in terms of a complex scalar dimension rather than a simple binary category (Givón 1994, Palmer 2001).

For the purpose of this work, these distinctions provide useful semantic criteria for the delimitation of modality and for the identification of modal markers.

1.2 Modality and functional theories

Having established these basic points, we can now concentrate on some preliminary methodological and terminological questions. Of course, it would be beyond the limits of this chapter to discuss all the various concepts subsumed under the general heading of modality and to provide a detailed description and investigation of all the different devices functioning in Latin. For present purposes, we limit ourselves to a closer examination of those modal forms that are characterized by polysemy and polyfunctionality. On the whole, their complexity derives from the fact that modality is not pure: neither purely semantic, nor purely syntactic, nor purely pragmatic, but mixing all three types of subdomains. Functional analysis focuses on this very interplay, and on the interaction of linguistic forms and (communicative) functions.

A functionally oriented study of modality will thus provide significant generalizations about the various functions that the formal means employed in this realm can carry out. But, if the functional variability of a particular modal form is to be examined, then it is necessary to identify it cross-linguistically before the various functions it serves can be studied. In this perspective, typology and diachrony can offer both the tools for investigating the diversity of modal expressions, and the theoretical framework for explaining the chronological relations of their functions.

1.3 Modality, typology, and diachrony

The typological account of modality has proven to be very helpful, but in this area cross-language comparison has been a difficult task, for there is probably more variation in the ways in which languages deal with modality than with other categories. In fact, different languages may use different grammatical

devices, and they may grammaticalize different (and not all) parts of the overall semantic field, which may be divided up and organized in various ways as well. Thus, although phenomena related to modality exhibit considerable similarities in different languages(see the detailed overview in Haspelmath, Dryer, Gil, and Comrie 2005: 286–322), the semantics often seems vague, and prototypical meanings and basic functions are difficult to identify.

Hopefully, the recent research efforts that consider both typological data and diachrony will cast some traditional issues in a different light, for synchronic typology is opaque without access to the relevant diachrony, and the diachronic perspective seems to be particularly appropriate to the study of modality, whose grammatical markers frequently exhibit richness of meanings and multiple uses.

Because, on the whole, language does not provide a static organization of meaning, "generalizations are more effectively formulated as generalizations about paths of development than as generalizations about synchronic states" (Bybee, Perkins, and Pagliuca 1994: 4). According to Bybee, Perkins, and Pagliuca, modal meanings arise from a restricted set of semantic sources, and multiple uses of forms can be viewed as points on grammaticalization chains. Therefore, cross-linguistically similar paths in the evolution of grammatical meanings are predictable; moreover, polysemy and polyfunctionality can be employed as diagnostic of the earlier history of grammatical markers of modality.

From the point of view of Latin, this methodology, which reads the semantic history from the pattern of multiple uses that a form displays, will help not only to recover information about the sources of modal expressions, but also to reconstruct the various stages along their developmental pathways.

2. Clausal operators and modality types

2.1 Modal operators

The description of modality offered by Role and Reference Grammar (Foley and Van Valin 1984, Van Valin and LaPolla 1997) is based on a theory that represents clause structure in terms of layers of grammatical units: the nucleus, the core, and the periphery.

The usual categories of verb inflection (tense, aspect, and mood) are operators which modify the clause and its parts. According to Foley and Van Valin (1984: 213), the terms mood and modality are often used in confusing and overlapping ways, because they cover in fact four distinct operators, called *Modality*, *Status*, *Evidentials*, and *Illocutionary Force*, which work over different clausal layers.

In this section we discuss these theoretical issues, comparing these terms (which appear with initial capitals to avoid ambiguity) with those adopted from Palmer's studies (1986, 2001) and illustrating their correlations with the different types and subtypes of modality.

The operator Modality refers to "the speaker's estimate of the relationship of the actor of the event to its accomplishment, whether he has the obligation, the intention, or the ability to perform it" (Foley and Van Valin 1984: 214). Because Modality identifies the conditions on the participant with regard to the main predication, it has both the nucleus and its core arguments in its scope; therefore, it is an operator of the core layer.

The second operator, Status,[4] expresses the reality status of the entire proposition: "One can think of status as covering a semantic continuum ranging from necessity (and *realis*) at one end to possibility (and *irrealis*) at the other" (Van Valin and LaPolla 1997: 41); it includes notions such as inference, probability, and uncertainty. Because the entire proposition is within its scope, it is a peripheral operator.

The next peripheral operator is the category of Evidentials: they "mark the truthfulness of the proposition in terms of the way the speaker has ascertained this" (Foley and Van Valin 1984: 218). In other words, Evidentials indicate the kind of evidence the speaker has for what he says, the sources of the information in the proposition.[5]

The entire periphery (Modality, Status, and Tense) is within the scope of Illocutionary Force, which is the outermost operator and "refers to whether an

4. The term "status" was proposed by Whorf to indicate the markers of Illocutionary Force, whereas "modality" was used for the indicators of speaker's commitment (Bybee 1985: 170).
5. "Evidentiality is a linguistic category whose primary meaning is source of information" (Aikhenvald 2004: 3). On Evidentials as a linguistic term see ibid. (11–17), on evidential systems see also Palmer (2001: 35–52).

utterance is an assertion, a question, a command or an expression of a wish" (Van Valin and LaPolla 1997: 41).

2.2 Event modality

All these notions, corresponding to non-epistemic meanings, belong to event modality, which describes "events that are not actualized, events that have not taken place but are merely potential" (Palmer 2001: 8). Event modality encompasses not only *deontic modality*, which is "concerned with the necessity or possibility of acts performed by morally responsible agents" (Lyons 1977, 2: 823), but also *dynamic modality*.[6]

The difference between deontic modality and dynamic modality relates to the conceptual source (Traugott and Dasher 2002: 109–111). The former includes permission and obligation, emanating from an external source; dynamic modality encompasses notions such as volition, ability, and need, whose source is clearly internal to the individual concerned.

2.3 Propositional modality

For Palmer, propositional modality includes not only *epistemic modality*, but also *evidential modality*: "The essential difference between these two types is … that with epistemic modality speakers express their judgments about the factual status of the proposition, whereas with evidential modality they indicate the evidence they have for its factual status" (Palmer 2001: 8).

These notions correspond to different operators. On the one hand, epistemic modality "is concerned with matters of knowledge, belief" (Lyons

6. Dynamic modality is also widely known as "root modality"; some scholars, however, equate the concept "root" with "non-epistemic": "but the term 'root' is a little unfortunate if it is used to include all non-epistemic modality, with the implication that this is more basic. If any kind of modality is basic it is, surely, dynamic modality" (Palmer 1986: 103). The vagueness of this term is also criticized by Nuyts (2001: 25).

1977, 2: 793), with the speaker's attitude to the reality of the event;[7] therefore, it relates to Status. On the other hand, evidential modality, specifically entailing the speaker's sources of information that form the basis of what he is saying, corresponds to Evidentials.

According to Aikhenvald, evidentiality "is a category in its own right, and not a subcategory of any modality" (Aikhenvald 2004: 7).[8] It must be observed, however, that the distinction between epistemic and evidential modality is not always clear. Inferential evidentiality, in fact, may involve either observable evidence or a mental construct only; thus this subtype, which signals the evidence as based on reasoning, entails the speaker's judgment as well, identifying an overlap category between epistemic and evidential modality (van der Auwera and Plungian 1998: 85). Therefore we assume that the notion of inference amounts to epistemic modality, which in this particular case expands to include both the speaker's "own judgments and the kind of warrant he has for what he says" (Palmer 1986: 51).[9]

In the following discussion, little space is devoted to evidential modality, for Latin does not have a set of evidential verbal affixes or auxiliaries, and the function of Evidentials is lexically performed by certain expressions or

7. "If the proposition is thought of as an expressed world (the 'described event') which is related to an actual referenced world, then epistemic modality can be said to index the degree of distance from the actual world" (Traugott and Dasher 2002: 107).
8. "That evidentials may have semantic extensions related to probability and speaker's evaluation of the trustworthiness of information does not make evidentiality a kind of modality" (Aikhenvald 2004: 7–8). On this point see also Lazard (2001).
9. In the first edition of *Mood and Modality,* Judgments and Evidentials are in fact considered two subsystems of epistemic modality (Palmer 1986: 51–54), and in Palmer (2001) the typological category Deductive (corresponding to the notion of inference) appears in both epistemic and evidential modality: "There is an obvious reason for this – deduction, as expressed by English MUST usually suggests that the judgment was based on evidence" (Palmer 2001: 8). The view that epistemic modal meaning and evidential meaning are separate but overlapping types of meaning is also found in Bybee (1985) and Willet (1988), and it can be accepted for our analysis of Latin, since this language does not grammaticalize information source. According to Aikhenvald, however, "Scholars tend to assume that evidentials are modals largely because of their absence in most major European languages, thus trying to explain an unusual category in terms of some other, more conventional, notion" (Aikhenvald 2004: 7), but the study of evidentiality across the world's languages confirms the importance of marking information source as a separate category.

Table 1. Layers, operators, and modality types

Layer	Operator	Modality type	Modality subtype
Core	Modality	Event modality	Dynamic/deontic
Periphery	Status	Propositional modality	Epistemic

by sentential adverbs (see Section 3.7.1), and by the subjunctive mood for reported speech (see Section 9.4).

The main operators and the corresponding types and subtypes of modality are summarized in Table 1.

2.4 Speech acts and modality

Illocutionary Force is, with Negation, an extremely important and universal operator, because in every language it must be possible to make statements, ask questions, and give commands. These three kinds of illocutionary acts can be assumed to be the basic speech acts (Lyons 1977, 2: 737).

Illocutionary force distinctions can be signaled by a variety of devices, for instance by syntactic means, adverbs, the addition of sentence-final particles or clitics, or prosody alone. In many languages, moreover, the basic speech acts are related to special sentence forms. For Lyons (1977, 2: 745), the three basic sentence types are: "declarative", "interrogative", and "imperative" (also called "directive").

As Palmer points out (1986: 24), however, there is no one-to-one correspondence between sentence type (formal category) and utterance type (semantic category); a command, for instance, may be expressed by an imperative sentence but also by a declarative or an interrogative sentence. Because the actual illocutionary potential of a sentence is crucially determined by the particular speech situation in which it is uttered, Illocutionary Force cannot be studied without considering pragmatic factors.

This operator relates also to the basic distinction between what is asserted and what is not asserted, which belongs to the *realis*/*irrealis* dimension (see Section 1.1). Since this contrast concerns the moods above all, as formal grammatical markers traditionally associated with the different sentence types, let us first discuss the relationship between mood and modality.

3. Mood and modal system

3.1 Mood and modal system

From a typological point of view, languages have different devices at their disposal to express modality: grammatical mood, modal verbs, modal adverbs and adjectives, modal particles, or verbs denoting (various degrees of) knowledge and belief. We follow Palmer (2001: 4) in dividing all these devices into two basic categories: mood on the one hand, and the modal system on the other.

Generally speaking, it seems to be the case that languages do not make equal use of these devices, because most of them can be characterized as having one or the other. Of course, mood and a modal system may also both occur within a single language; very frequently, however, only one of these means seems to be more salient.

Latin, like the Romance languages, has a system of mood as well as a modal system encompassing a set of "modal" verbs and other devices such as modal expressions, modal adverbs, and modal particles.

3.2 Mood and mode

The first point that must be made is a clear distinction between mood and modality. According to Bybee (1985: 169), "Modality designates a conceptual domain which may take various types of linguistic expression, while mood is the inflectional expression of a subdivision of this semantic domain". In Latin and in many modern European languages, which have indicative, subjunctive, and imperative moods, this distinction could be handled in terms of "the formal features versus the typologically relevant semantic categories of which they are the exponents" (Palmer 1986: 21). In order to keep these concepts distinct, we use the term mood only to indicate the language-specific formal features of the verb.

Roman grammarians adopted the term *modus* ('manner', 'mode'), by which is usually meant the form that a verb assumes in order to reflect the manner in which the speaker presents the action or the state (Ernout & Thomas 1951: 183).

Because there were grammatical markers for modality in their languages, the ancients assumed that there was a set of notional categories, the modes, marked by the moods. As to the nature of the modes, they developed two different theories observing either how the moods reflect the "mental attitudes" of speakers, or the way they are used in different functions according to the various sentence types. Ever since, however, the search for a coherent set of semantic and/or functional categories characterizing the modes represented by the moods has been a difficult task, for multiple meanings and uses often characterize the moods in subordinate as well as independent clauses. Bearing this in mind, in the following discussion we try to make sense of polysemy and polyfunctionality, but we avoid the use of "mode" as a theoretical term.

3.3 The moods

In Latin, the mood-forms have been reduced to three: the indicative, the subjunctive, and the imperative. These are also called finite moods, for they allow personal endings on the verb (the imperative, however, marks distinctions of person and number to a limited extent) and may appear as the main verb of an independent clause. Since neither of these things is true of the infinitive, it is classified as a nonfinite mood,[10] or as a nominal form related to the verb, like the participles (Ernout & Thomas 1951: 183).

This kind of three-term system is rather diffuse, but its evident inconsistency as to the correlation with the basic sentence-types suggests that only some of the moods work as simple speech act markers, whereas others perform more complex functions (Bybee 1985: 169–171). Although their distribution within modality is cross-linguistically predictable, the contrasts and interrelations between the moods are, to some extent, system-specific, as can also be inferred from the analysis of Latin.

10. Yet Latin, like many other languages, uses the infinitive as the verb of main clauses in narrative, exclamative, and jussive sentences.

3.3.1 Indicative

Etymologically, the *indicativus* is the “indicative” or “pointing out” mood. This form of the verb is typically used when the speaker is making a statement that he believes to be true, a statement having declarative illocutionary force.

It is worth noting that the status of declaratives vis-à-vis the category of modality is somewhat controversial. Since “the speaker, in uttering an unqualified assertion, is committing himself to the truth of what he asserts” (Lyons 1977, 2: 797), this sentence type is often considered unmarked for modality (Palmer 2001: 64). As a matter of fact, however, a statement involves notions such as reality, truth, and assertion, which we assume to be part of the overall system of modality; thus it may be best to treat declaratives, and the indicative, as the semantically unmarked terms of *realis*.

A further point is that declaratives are often assumed to be formally unmarked as well. But in Latin, as in other languages that have a system of moods, the indicative has a full set of inflections and is as clearly marked by the verbal morphology as the subjunctive (Palmer 1986: 27). The real problem is that the indicative covers diverse functions across languages according to its relationship with the other moods in the specific system. It may be the unmarked sign of the declarative in languages such as Quileute, where it contrasts with an interrogative mood (Bybee 1985: 170); but in Latin, as in many languages, the indicative contrasts with the subjunctive and is thus used also in certain kinds of questions (Section 8.2.2).

From this it might be suggested that the indicative, which is typically (but not exclusively) used for declaratives, is not nonmodal or unmarked per se, but specifies its roles and functions within modality depending on different mood systems as well as contextual factors and clausal operators.

3.3.2 Imperative

In most languages, the verb form used in issuing direct commands and orders is the imperative, which is “hardly a mood at all but traditionally classified as such” (Baldi 2002: 400). By this it is meant that the speaker “merely ‘presents’ a proposition, just as with the declarative, but for action, not merely for acceptance as true, by the hearer”, and for that reason the imperative is reckoned to be the semantically unmarked term within the deontic system (Palmer 1986: 30).

Due to its very specific speech act functions, the imperative is minimally marked from a formal point of view as well. Generally speaking, direct commands are restricted to a second person subject, and in Latin we find two forms, for the singular and the plural (*audi*, *audi-te* 'listen!'); the singular consists of the bare stem which, in some cases, is further reduced (e.g., *dic* 'speak!'), for zero-marking is indeed common even in inflected languages.

The above forms of the imperative order immediate obedience, while a second type, called the "future imperative", expresses a command that is not to be obeyed immediately. It had only one form used in both second and third persons: *audi-to*, where the ending *-to*(*d*) was probably originally the ablative of the demonstrative pronoun *to-* with the meaning 'from that (moment)'. This imperative "can be depicted as having passed through two phases, the apersonal one and the personal one" (Rosén 1999: 117), for after the creation of the analogical plural forms in *-tote*, *-nto*,[11] the *-to* form also became a person-number morpheme, disambiguated by its environment as second or third person.

As mentioned earlier, the imperative is chiefly associated with directive sentences; this function, however, may also be performed by the subjunctive, a mood that is cross-linguistically characterized by the greatest semantic and functional variety.

3.3.3 Subjunctive, optative, and injunctive

Usually associated with *irrealis*, the subjunctive (*subiunctivus* or *coniunctivus*) is, as its name suggests, the "subordinating" or "subjoining" mood. Nonetheless, subordinate clauses are the result of a long process of evolution in syntax, and the subordinating uses of the subjunctive are generally assumed to develop out of the uses in main clauses, where the primitive functions are supposed to be best preserved.

On the origins of the Latin subjunctive there is a long literature (Calboli 1966–1968, 1983), and no satisfactory solution. Many scholars explain its semantic richness and functional multiplicity with the fact that it con-

11. A separate second plural form was created by the addition of the person/number ending: *audi-to-te*; while the third person plural *audiunto* is analogical on the basis of the corresponding present indicative *audiunt* (Ernout 1953: 169).

flates the forms and the meanings of the IE subjunctive and optative moods, whose central notions were respectively will and wish (Delbrück 1893–1900, 2: 365–369).

According to Delbrück, the original functions of the subjunctive are continued in Latin by the *volitive* subjunctive, which is used in main clauses expressing self-exhortations, positive instructions, and prohibitions, encroaching on the territory of the injunctive (see Section 7.4.1). Moreover, the fact that many future forms are derived from earlier subjunctive forms has been considered evidence in favor of a *prospective* sense (Handford 1947: 83).

On the other hand, the *optative* subjunctive inherits its functions from the IE mood that survived in Greek and Sanskrit and is used independently to express wishes. Moreover, since the optative "can also express a merely logical possibility" (Gonda 1956: 57), the uses of the *potential* subjunctive also seem to find an explanation.

Even if it is probable that the subjunctive started in Latin with a more or less composite set of meanings, the chronological relations of the different functions that gradually developed are impossible to disentangle. And the situation is further complicated by the fact that considerable redistribution and fusion have taken place from a formal point of view as well. In fact, the Latin subjunctive combines both optative and subjunctive forms (Ernout 1953: 159–166, Calboli 1966–1968: 198–229), but their distribution among the numerous uses is capricious, varying with different persons and depending on verb or sentence type.

Considering that there is no such preponderance of formations associated with a specific meaning as would be required to prove the original connections with the two IE moods, the semantic characterization of the Latin subjunctive has also been called into question. Some scholars observed, first, that the distinction between will and wish (and between prospective and potential) is a delicate one, and many of the examples admit different interpretations; and second, even in Sanskrit and Greek, the distinction between optative and subjunctive is very far from complete, and there is much overlapping in meanings and functions.[12] Casting doubts on the existence of two separate moods

12. In Vedic and in Homeric Greek, the subjunctive is used to express the speaker's desire for the realization of the action or state described (volition), or simply his expectation of

as a general characteristic of IE languages,[13] Delbrück's critics obviously rejected the idea that the meanings of the Latin subjunctive result from a fusion of those belonging to subjunctive and optative.

Moreover, those scholars who accept the syncretistic explanation also criticize the view that the notions of will and wish are the sources of all the attested uses of the Latin subjunctive. Núñez, for instance, rejecting the idea that a volitional meaning exists, refers the jussive (and other) functions to the concept of necessity (Núñez 1991: 217–218). On the other hand, fostering Gonda's opinion that the main characters of the optative are "visualization and contingency" (Gonda 1956: 51), he posits the notion of possibility as the other basic meaning of the Latin subjunctive (Núñez 1991: 223–233).

While several difficulties arise in regard to such an approach (Section 7.3), suffice it to say here that it has the advantage of recognizing the core notions of modality, possibility, and necessity as the basic semantic properties of the subjunctive mood.

3.4 Mood and modality

In light of the discussion in the preceding paragraphs, one immediate observation is that the category of mood is not only one of the means by which languages can grammaticalize the overall semantic field of modality; it also expresses all the basic concepts that we assumed to be relevant in this domain. In fact, in traditional grammar all the operators are conflated under this term because mood is primarily related to the *realis/irrealis* dimension, a complex domain that intersects with a host of other semantic and pragmatic categories.

The Latin moods are clearly associated with Illocutionary Force; but the imperative and the volitive subjunctive are transparent examples of mood expressing Modality as well, whereas the potential subjunctive is mainly related

its realization (projection, likelihood). The optative is used when the speaker expresses wishes or desires (desiderative), or when the action or state is a possibility (potential). In Sanskrit the subjunctive gradually disappeared, for the most part absorbed by the optative. See Gonda (1956) and Wackernagel (1926–1928, 1: 222–239).

13. For a detailed discussion of this point see Handford (1947: 16–23).

to Status; in reported speech, moreover, this mood can also perform the function of Evidentials.

In this respect the subjunctive contrasts with the indicative and the imperative, which turn out to occupy limited subregions within modality. The indicative, on the one hand, is typically used to present statements of fact and is thus inherently under the scope of *realis*. Of course, it can occasionally signify uncertainty or other epistemic senses, for instance when used in questions (Section 8.2.2) or in the future tense (Section 10.1), but in both cases the expression of modal values is a matter of interaction with the outer operators, respectively Illocutionary Force and Tense. The imperative, on the other hand, associates with *irrealis*, but as an indicator of speech act type specifically related to directive sentences it can only express event modality and necessity.

Conversely, the Latin subjunctive, whose wide functional range involves all the operators, covers broader regions within *irrealis*, manifesting not only the notions of necessity and possibility, but also both deontic and epistemic meanings and uses (Núñez 1991: 62).

3.5 Modal system and modality

The other means by which languages deal with the overall category of modality is the modal system, which encompasses many different devices; the most important among them are the modal verbs.

The use of these verbs to express modality is very frequent in the European languages, but there are some notable differences among them. English modals, for instance, are a subset of auxiliary verbs that can be identified by formal properties of their own,[14] whereas in German and the Romance languages there appear to be no specific grammatical indications that the modal

14. In addition to the so-called NICE properties, which are shared with the other auxiliary verbs *be* and *have*, English modals also have the following formal features: they do not co-occur, they have no -*s* forms for their third person singular, they lack both nonfinite forms and imperatives, there are suppletive negative forms, and they show formal differences, in their epistemic and deontic senses, in terms of negation and tense (Palmer 2001: 100–101).

verbs, although exhibiting some idiosyncrasies, constitute a clearly defined category (Palmer 2001: 100–103).

Likewise, in Latin it is difficult to single out a set of modal verbs according to purely formal criteria (Núñez 1991: 63); on the basis of semantic criteria, however, we can consider as modal only those forms expressing various shades of possibility and necessity. This is a basic feature that the modal verbs have in common with the category of mood. In this respect, moreover, they share with the subjunctive in particular the property of expressing deontic as well as epistemic meanings.

In this investigation of Latin we agree with Núñez (1991: 64) in distinguishing, within the modal system, between modal forms and semimodal forms according to the following crucial semantic property. Modal forms are verbs and expressions that, like the subjunctive, manifest both deontic and epistemic meanings. Semimodal forms are verbs and expressions that, like the indicative and the imperative, lack either of these meanings.

3.6 Modal forms

In addition to the moods, Latin has various forms that may express the notions of possibility and necessity: these are the modal verbs *possum, licet, debeo*, and *oportet*, and the impersonal phrase *necesse est*.

All these forms present various meanings and different syntactic constructions. As Bolkestein (1980) points out, in the study of a modal form the different patterns are to be kept apart, because the syntactic distinction is relevant with respect to certain semantic properties: in particular, it seems that the epistemic meanings are exclusively or more easily found with particular kinds of constructions. Her interesting proposal, partially criticized by Núñez (1991: 68–77), is not discussed here, for it would require a dedicated analysis, which is beyond the limits of the present work.

The following paragraphs list the different senses and syntactic patterns of the modal forms, and the examples corresponding to these various meanings and uses are given in sections 5 and 6, which also offer a detailed analysis of the different modality types.

3.6.1 Possum and licet

The verb *possum* expresses various shades of possibility; as a modal verb it has a two-place construction with a nominal subject and an infinitival complement.

The impersonal form (*non*) *potest* occurs in a one-place pattern, with the one position filled by a single infinitive. The frequent use in conjunction with the verb *fio* 'become' gives rise to the impersonal expression (*non*) *potest fieri*, 'it is (im)possible', in a one-place pattern with the one position filled by a subjunctive clause that may be introduced by either *ut* or *quin*.

The impersonal verb *licet* means 'it is permitted', but also 'it is possible', and occurs in two different syntactic patterns: the first is a one-place pattern, with the one position filled by a clause that may be either nonfinite (an Accusativus cum Infinitivo) or finite (a subjunctive clause, rarely introduced by *ut*). The second is a two-place pattern with the two positions filled respectively by a nominal constituent in the dative case and by an infinitival clause.

3.6.2 Debeo, oportet, and necesse est

The verb *debeo* has the general meaning 'be under an obligation' and may occur in two different frames: as a full verb, with the meaning 'owe', it shows a three-place frame with all the argument positions filled by nominal constituents; as a modal verb, it has a two-place frame with a nominal subject and an infinitival complement.

The impersonal verb *oportet* occurs in a one-place pattern, with the one argument position filled by a complement clause that may be nonfinite or finite: in the first case we have an Accusativus cum Infinitivo construction; otherwise we have a subjunctive clause, optionally introduced by *ut*.

The expression *necesse est* 'it is necessary' is a copular construction consisting of an uninflected form plus a form of *esse*. It may occur in two different syntactic patterns: the first is a one-place pattern, with the one position filled by a clause that may be either nonfinite (an *Accusativus cum Infinitivo*) or finite (a subjunctive clause, optionally introduced by *ut*). The second pattern is a two-place frame with the two positions filled by a nominal con-

stituent in the dative case and either a clause with the verb in the subjunctive mood (plus *ut*) or a single infinitive.

3.7 Semimodal forms

On the basis of the definition given in Section 3.5, semimodal forms are the gerund and the gerundive with the indicative of *esse* 'be' (Magni forthcoming a); the verb *queo* 'be able' and its opposite *nequeo* (Moussy 2001); the noun *opus* in predicative function: *opus est* 'be needed, useful', and similar expressions indicating various shades of necessity such as *meum, tuum, ius, aequum*, *par* ... *est* 'it is my, your duty; it is just, right, proper'; the verbs *decet* 'it is proper, fitting' and *ualet* 'it is possible', indicating possibility; and the verb *uolo* 'will'.

All these forms have in common the expression of dynamic and occasionally deontic meaning but cannot be used in epistemic function. Therefore we side with Bolkestein (1980: 153 n.1) and Núñez (1991: 65) in excluding them from the category of Latin modal forms.

For the same reasons we will include among semimodal forms the modal adverbs (see Ricca, this volume), the modal adjectives, and the modal particles (see Rosén, this work, vol. 1).

3.7.1 Modal adverbs and modal adjectives

Let us briefly discuss sentence adverbs such as *quidam, sane, uero, profecto, certe, clare* 'undoubtedly, surely, truly, certainly, clearly, evidently'; *fortasse* 'perhaps, probably'; and others with similar meanings. It stands to reason that all of them are modal, but strictly related only to propositional modality. According to Foley and Van Valin (1984: 219–220), to the extent that these modal adverbs manifest the speaker's assessment of the truth status of the potential or necessary event, they can be considered as outer-peripheral operators – that is, Evidentials (see also Núñez 2001).

This implies an important distinction between modal adverbs and modal adjectives; in fact, while the former modify the truth of the proposition, the latter modify the reality state of the proposition: therefore they are indicators of Status. This is corroborated by the fact that modal adverbs cannot be under the scope of modal adjectives.

Things are different with regard to the attitudinal adverbs (such as *libere* 'candidly', *aperte* 'frankly', *breuiter* 'briefly'), which on the whole have little to do with modality, understood as the expression of necessity or possibility. Nonetheless, it is worth noting that some of them can be considered Illocutionary Force adverbs, for they express "the speaker's view of the nature of the message he is transmitting or the form preferred by the speaker of the anticipated addressee's response" (Foley and Van Valin 1984: 222).

As for the modal adjectives, we may also mention the deverbal forms in *-bilis*, which generally have passive meaning and express possibility (Leumann 1917: 80–134 and Magni forthcoming a, Magni forthcoming b).

3.7.2 Modal particles

Since modality is not confined to verbal features, "modal" particles can also be considered among the markers of modality: they are discussed by Rosén (this work, vol. 1); for negative particles, see Section 10.2.

3.8 Modal markers and semimodal markers

Summing up the preceding discussion, the indicative and imperative on the one hand, and the semimodal forms on the other, may be assumed to relate to modality only to a limited extent. Because they can express either event modality or propositional modality, or merely illocutionary force distinctions, they will be considered semimodal markers.

Differently, the subjunctive and the modal forms share a wide functional and semantic range that reflects their complex relationships with different operators. As a consequence they can manifest the category of modality in various shades and at many levels, and since they specifically express the core notions of possibility/necessity and deontic/epistemic, they are to be considered modal markers.

The relevance of the notions of possibility/necessity and deontic/epistemic is corroborated by typological studies of modality. Further, the use of the same form (in specific modal verbs) for both event and propositional modality seems to be characterized by a sufficient amount of cross-linguistic regularity to deserve a detailed analysis within Latin.

In this perspective, the divide between semimodal and modal markers is relevant not only to the synchronic description of modality, but also to the diachronic study of the category, because it has been argued that there exists a temporal priority of deontic vis-à-vis epistemic, not only in diachronic change (Bybee 1985: 168, Palmer 2001: 99). but also in first and second language acquisition (Giacalone Ramat and Crocco Galèas 1995).

Polysemy and polyfunctionality are thus crucial issues, and for that reason our investigation focuses on those forms that are characterized by richness of meaning and multiple uses, studying their different functions "as though they were links on a chain, one having given rise to another" (Bybee, Perkins, and Pagliuca 1994: 17). This approach is based on the hypothesis that semantic development is predictable and that multiple uses of forms are not randomly distributed but are associated and located along certain pathways that reflect the evolution of grammatical meanings.

Although the hypothesis that semantic change is unidirectional is not uncontroversial (e.g., Narrog 2005), typological studies confirm that, as far as modal verbs are concerned, dynamic and deontic meanings are more basic in a diachronic perspective. Hence we first consider event modality.

4. Modal verbs and event modality

4.1 Possibility and necessity

Discussing the relationship among the different modality types and operators, we have seen that event modality corresponds to Modality. According to Van Valin and LaPolla (1997: 41), this core operator refers "to what is called the root, or deontic, sense of modal verbs. This category includes such things as strong obligation (*must* or *have to*), ability (*can* or *be able to*), permission (*may*) and weak obligation (*ought* or *should*)". In Latin these various shades of possibility and necessity are expressed by the verbs *possum, licet*, *debeo*, *oportet*, and the impersonal phrase *necesse est*, which are characterized by semantic richness and multiple functions already in Early Latin.

As was suggested in Section 1.2, the divide between possibility and necessity is a useful basis for defining modality. Van der Auwera and Plungian, for instance, reserve this term uniquely for "those semantic domains that in-

volve possibility and necessity as paradigmatic variants, that is, as constituting a paradigm with two possible choices, possibility and necessity" (1998: 80).

Before describing the properties of Latin modal forms within event modality, we must introduce some additional notions in order to analyze its dynamic and deontic subtypes. Since Modality concerns the speaker's estimate of the relationship of the participant of the event to its accomplishment, it is important to determine both the speaker's role and the conditioning factors with regard to the main predication – the enabling or compelling circumstances that make the event either possible or necessary.

4.2 Participant-internal and participant-external modality

Dynamic and deontic modalities are often grouped together under agent-oriented modalities, distinguished from speaker-oriented modalities. Agent-oriented modality "reports the existence of internal and external conditions on an agent with respect to the main predicate" (Bybee, Perkins, and Pagliuca 1994: 177). This is the basis of the distinction between dynamic and deontic, which actually differ from the point of view of the conceptual source that determines the action: in the former the source is internal to the participant, while the latter presupposes external sources.[15]

What is wrong with this description is that agent-oriented modality includes permission and obligation which, by contrast, stem from the speaker (Palmer 2001: 84–85). Speaker-oriented modalities, on the other hand, are meant to encompass notions such as imperative, prohibitive and optative, which should rather pertain to Illocutionary Force (van der Auwera and Plungian 1998: 83). Bybee's proposal has also been criticized from a terminological point of view; indeed, the term "agent" is not quite felicitous, because it seems to imply that the participant of the event must always assume the corresponding semantic role (ibid.).

Therefore, in order to avoid ambiguity, we adopt the terminology proposed by van der Auwera and Plungian, assuming a distinction between par-

15. For a discussion of conceptual sources see Traugott and Dasher (2002: 109–110).

ticipant-internal modalities and participant-external modalities in both domains of possibility and necessity.[16] In the following discussion, which is largely based on Magni (2005), the more general term "states of affairs" is used to refer to events.

4.2.1 Possibility: Ability and permission

Participant-internal modalities refer to the conditions internal to a participant engaged in the state of affairs. In the case of possibility we are dealing with the participant's ability (or capacity) to do something. An example is (1):

(1) Plaut. *Bacch.* 580: *comesse panem tris pedes latum* ***potes***
'you can eat up a loaf three feet wide'

Participant-external possibility involves circumstances that are external to the participant engaged in the state of affairs and that make this state of affairs possible, as in (2):

(2) Plaut. *Asin.* 833–834: *decet uerecundum esse adulescentem, Argyrippe.* **::** *Edepol, pater, merito tuo facere* ***possum***
'it becomes a young man to be respectful, Argyrippus. **::** Ah yes, father, through proper regard for you, I can do it'

A special case of participant-external modality is that of deontic modality.[17] In the case of possibility, it identifies the enabling circumstances external to the participant as some person(s) and/or as some social or ethical norm(s) which permit the participant to engage in the state of affairs. Permission is thus a matter of deontic possibility; it is illustrated in (3):

(3) Plaut. *Amph.* 393: *animum aduorte. Nunc* **licet** *mihi libere quiduis loqui*
'then pay attention. Now I am permitted to say freely anything I please'

16. The choice of the term "participant" and this distinction are discussed and motivated in van der Auwera and Plungian (1998: 83–84). On various approaches to classification, see also the discussion in Narrog (2005: 680–682).
17. The view that deontic modality is a subcategory of participant-external modality is relatively new, but, as van der Auwera and Plungian (1998: 84) point out, it agrees at least partially with Bybee's and Goossens's findings, which are illustrated in Section 5.

4.2.2 Necessity: need and obligation

We now come to necessity, where, except for the expression of participant's internal needs, which is very marginal, a parallel situation to possibility exists.

Participant-external necessity includes the subdomain of deontic necessity, a strong obligation due to some social or ethical norm or to some person obliging the participant to engage in the state of affairs. Examples (4)–(6) describe various shades of obligation:

(4) Plaut. *Amph*. 501: *mihi* ***necesse est*** *ire hinc*
'I have to go away from here'

(5) Plaut. *Amph*. 39–40: ***debetis*** *uelle quae uelimus: meruimus / et ego et pater de uobis et re publica*
'you should wish for what we wish for; my father and I have earned your recognition and that of the state'

(6) Plaut. *Stich*. 503–504: *ut consulam / qua lege nunc med essurire* ***oporteat***
'so that I can find out by which law I have to starve now'

5. Modal verbs and propositional modality

5.1 Epistemic meanings

The symmetry between possibility and necessity includes epistemic meanings as well. More precisely, on the one hand epistemic possibility involves uncertainty, or probability, as in (7):

(7) Plaut. *Asin*. 118–119: *non esse seruos peior hoc quisquam* ***potest*** */ nec magis uersutus nec quo ab caueas aegrius*
'a more rascally servant than this one of mine cannot be found, or a more wily one, or one harder to guard against'

Epistemic necessity, on the other hand, presupposes a relatively higher degree of probability, or inference, as in (8):

(8) Plaut. *Asin*. 381–382: *ut demonstratae sunt mihi, hasce aedis esse* ***oportet***, */ Demaenetus ubi dicitur habitare. I, puere, pulta*
'as pointed out to me, this must be the house where Demanetus is said to live. Go, boy, and knock'

The assignment of non-epistemic and epistemic modalities to different clausal layers is a crucial distinction that permits a description of the polysemy of these forms in terms of a diachronic trend already observed for the English modal verbs: "The basic tendency in diachronic developments for clause operator is from more-inner operators to be re-analyzed as operators over outer layers" (Foley and Van Valin 1984: 216). In other words, the modal forms tend to expand from the core operator Modality, to take on the functions of the peripheral operator Status as well.

Nevertheless, we need understand the way this happens in Latin, that is, under which conditions the epistemic readings become possible for the modal forms we are dealing with.

5.2 Modal meanings and state of affairs–types

The process described above is often discussed in cross-linguistic perspective, but little room is devoted to detailed explanation. A serious attempt can be found in the thorough study of Bolkestein, who considers several syntactic and semantic factors in explaining differences in meaning among Latin expressions of necessity, also discussing Chafe's (1970) insights about the relevance of the semantic properties of the complement-predication (Bolkestein 1980: 60–63).

The view that the modality type realized by a given modal is related to the state of affairs in which the participant is involved is confirmed in Goossens (1987), where states of affairs are classified into four different types according to the parameters [±dynamic] and [±control]. This leads to the following subclassifications: *actions* ([+dynamic] [+control]) and *positions* ([−dynamic] [+control]), which are subsumed under the label *events*; and *processes* ([+dynamic] [−control]) and *states* ([−dynamic] [−control]), which are labeled *situations* (Goossens 1987: 22). As Goossens puts it, non-epistemic modals typically combine with events – predications that designate

controlled states of affairs – whereas epistemic modals require situations – predications that designate uncontrolled states of affairs.

These basic claims can be very useful in explaining how diachronic developments in modal meanings come about.

5.3 Meanings and change of meaning along the possibility path

Let us consider the verb *possum*. At the very beginning it is equivalent to the semimodal verb *ualere* or to *pollere*[18] and is meant to involve the simple idea of physical strength and capability, as illustrated in (9):

(9) Plaut. *Truc*. 812–813: *plus* ***potest*** *qui plus ualet. / uir erat, plus ualebat: uicit, quod petebat abstulit*
'he can do the most, who is strongest. He was a man, he was the strongest: he prevailed, what he wanted, he carried off'

It can also show the nonmodal meanings 'to have influence, have power over or of X',[19] as in (10):

(10) Plaut. *Asin*. 636: *uidetin uiginti minae quid* ***pollent*** *quidue* ***possunt****?*
'do you see the power of twenty minas, or what they are capable of?'

The ability sense develops when X is realized by means of an infinitive, with a shift from "controllable entity" to a state of affairs. Because event modality expresses the relationship of the participant in the state of affairs to its accomplishment, controllable and dynamic states of affairs have a crucial role in the acquisition of ability meanings, in particular physical actions, as can be seen in (11), similar to (1):

18. On the limits of this synonymy, cf. Orlandini (1998: 1023).
19. Note that this meaning is still present in Classical Latin: an example is in Cic. *Rosc*. 4: *a me autem ei contenderunt qui apud me et amicitia et beneficiis et dignitate plurimum possunt* 'I have been pressed to do so by men whose friendship, acts of kindness, and rank have the greatest weight with me'. Consequently we cannot agree with van der Auwera and Plungian when they claim that the phrase *potis esse* in pre-classical times seems to have had only modal meanings, while "the later verb *posse* … also has the non modal meanings 'to have influence, to avail'" (1998: 106). It is not a case of demodalization, as they claim, but the preservation of ancient semantic values.

(11) Plaut. *Aul*. 557–559: *praeterea tibicinam, / quae mi interbibere sola, si uino scatat, / Corinthiensem fontem Pirenam **potest***
'and that female flute-player in addition! She could take the fountain of Pirene at Corinth and drink it dry, all by herself, if it ran wine'

Thus, dynamic modality is the first step within event modality. In this case, the accomplishment of the state of affairs is completely dependent on the participant's ability/capacity; and the notion of control is still important when external circumstances make the state of affairs possible or permitted. This further development is a matter of semantic generalization related to the widening of the contexts in which the modal form can be used. In other words, the range of possible states of affairs described by the complement predication increases.

5.3.1 State of affairs–types and Subject-types

The extension of meaning is gradual and initially favored by particular kinds of states of affairs. In fact, non-epistemic modals "as a rule require an event, i.e. a non-progressive, non-perfective action or position", but they "are also compatible with controllable/controlled situations" (Goossens 1987: 27). And it is precisely in these areas of ambiguity between situations and events that we expect the boundaries between propositional modality and event modality to be the least clear, and the semantic change to take place.

In this perspective, perception and cognition verbs have a special part to play, first because they can involve ambiguity between participant-internal and participant-external modality, as in (12):

(12) Plaut. *Amph*. 146–147: *ea signa nemo horum familiarium / uidere **poterit**: uerum uos uidebitis*
'no one of these domestics will be able/permitted to see these marks; but you will see them'

Second, these types of states of affairs can "freely combine with both epistemic and non-epistemic modals" (Goossens 1987: 35), probably because they belong to the broader class of experiential states, with Experiencer as their first argument. When they combine with a modal form, the participant cannot be assumed to be responsible for the event, for he turns out to be

a nonprototypical, non-agentive Subject. Generally, situations in which the participant is not the controlling Agent, and/or where there is no dynamic development, as in the case of states, are prone to an epistemic interpretation, as in (7).

Thus, first *possum* predicates that enabling conditions exist in the participant; next it predicates that enabling conditions exist outside the participant; finally it predicates only that enabling conditions exist. This can be equivalent to saying something about the actuality of the event – that is, about the reality status of the entire proposition, whether it is merely possible, probable, or uncertain.

Let us confirm these observations by adding further examples. The form *licet* is typically meant to involve the person who is granted the permission, and some authority viewed as not obstructing (or requested not to obstruct) the realization of the state of affairs with which the permission is concerned (e.g., Plaut. *Merc*. 989: *per me sibi habeat licet*).

The generalization of meanings, however, can lead to combining this modal form with controllable situations whose accomplishment does not depend on a permitting authority, but turns out to be possible simply by virtue of some undetermined participant-external conditioning factor, as in (13):

(13) Plaut. *Persa* 799–800: *stultitiast, / cui bene esse* ***licet***, *eum praeuorti litibus*
'it is silly to turn to legal actions when someone could be enjoying himself'

And when uncontrollable states of affairs are described, the sentence may involve ambiguity between deontic and epistemic meanings, as in (14):

(14) Plaut. *Amph*. 594–595: *sum profecto et hic et illic. Hoc cuiuis mirari* ***licet***, */ neque tibi istuc mirum magis uidetur quam mihi*
'I am here and there, positively. Anyone could marvel at it, and it is no more wonderful to you than it is to me'

Now, the characterization of non-epistemic modalities as involving acts performed by physically or morally responsible agents suggests that the epistemic reading is favored with less prototypical participants (non-agent, non-

human, non-individuate, inanimate).[20] In other words, if there is no actor whose relationship to the accomplishment of the state of affairs can be estimated by the speaker, we are out of event modality, and a shift toward propositional modality takes place. Hence, for modal forms, the process of semantic generalization is not only connected with the state of affairs–type, but is also related to the role and the characteristics of the participant.

5.4 Meanings and change of meaning along the necessity path

Looking for the tracks along which the development of modal meanings takes place, we find that, while *possum* shows a rapid semantic change, things are different with *debeo*. In Plautus, for instance, it occurs 54 times, and in 52 cases it behaves as a "full" verb, with the meaning 'owe' and a three-place construction. This verb presents modal senses in only two cases: *dare debet* in *Persa* 160 and in example (5). Epistemic meanings are completely absent, but they are fully developed in Classical Latin; an example is in (15):

(15) Petron. 33,8,3: *deinde ut audiui ueterem conuiuam: 'hic nescio quid boni* ***debet*** *esse', persecutus putamen manu, pinguissimam ficedulam inueni*
'but hearing a practiced diner say: "here there must be something good", I poked through the shell with my hand, and I found a very plump figbird'

In Lucretius *debeo* occurs 77 times, in about 50 % with epistemic meaning. Not surprisingly, since "epistemic modals as a rule combine with situations" (Goossens 1987: 27), the verb is frequently combined with *esse* or similar predicates, as in (16):

(16) Lucr. 2,979–981: *et sibi proporro quae sint primordia quaerunt; / quando quidem totis mortalibus adsimulata / ipsa quoque ex aliis* ***debent*** *constare elementis*

20. According to Chung and Timberlake (1985: 257), "An analogy can be drawn between the actuality of the events and the definiteness/referentiality of participants". See also the discussion of the subjects of modals in Traugott and Dasher (2002: 108–109).

‘they go so far as to examine what their own first beginnings are; since they resemble the all mankind, they also must consist of other elements’

5.4.1 State of affairs–types, tense, and aspect

The claim that epistemic modals may also occur with perfective states of affairs (Goossens 1987: 27), as in (17), confirms the interaction of modality with tense and aspect:

(17) Lucr. 1,232–233: *omnia enim* ***debet****, mortali corpore quae sunt, / infinita aetas consumpse ante acta diesque*
‘since all things which are of perishable body must surely have been consumed by infinite time and ages past’

As for temporal reference, Bolkestein (1980: 63–64) says that the verb in the complement-predication of the deontic meaning does not have a “deictic” function, whereas inferences are usually drawn about states of affairs conceived as actually existing at some point in time. Accordingly, perfect tense predications, which describe completed, no longer controllable states of affairs, and also exclude the non-actuality implied by sentences with directive illocutionary force, trigger epistemic meanings.

Referring to the state of affairs–types with which the epistemic readings are favored, an additional point must be made. Since many inferences concern some general law of nature or physical process, the state of affairs, even if described by a dynamic predicate, turns out to be habitual or repetitive (Bolkestein 1980: 95). In this case the event can acquire “situation-like” properties that determine a shift away from the deontic meaning. As a result, epistemic modals “are occasionally compatible with prospective and habitual events, which are then viewed as [+situation-like]” (Goossens 1987: 27). An example is in (18), whose reading is clearly epistemic:

(18) Lucr. 4,658–660: *hoc ubi quod suaue est aliis aliis fit amarum, / illi, cui suaue est, leuissima corpora* ***debent*** */ contractabiliter caulas intrare palati*
‘therefore if what is sweet for some is bitter to others, for the being

to whom it is sweet, very smooth bodies must enter the pores of the palate with soothing touch'

As for the other modal forms, the impersonal expression *necesse est* is also prone to an epistemic interpretation with a perfect tense infinitive, as in (19):

(19) Ter. *Hec*. 304: *sed magnum nescioquid* ***necessest*** *euenisse, Parmeno*
'but something of consequence must have happened, Parmeno'

And the same is true of *oportet*, when combined with nondynamic and uncontrollable states of affairs, as in (20), or with perfect tense infinitives, as in (21):

(20) Plaut. *Amph*. 322: *atque haud longe abesse* ***oportet***, *uerum longe hinc afuit*
'he must be somewhere near, indeed he was far away'

(21) Plaut. *Amph*. 1031: *prodigum te fuisse* ***oportet*** *olim in adulescentia*
'you must have been a spendthrift in your younger days'

5.5 The domain of intention

One of the most notable characteristics of *oportet* is that epistemic meanings are not only developed earlier than for *debeo* and *necesse est*, but they are also definitely more frequent than non-epistemic meanings: to be precise, in Plautus *oportet* has epistemic senses 85 times out of 144. This datum, ignored by the traditional syntaxes and also by Bolkestein (1980), calls for an explanation.

According to Ernout & Meillet ([1994] s.v.), *oportet* differs from *necesse est*[21] because it was originally meant to indicate "la convenance, le devoir moral plutôt que la nécessité", that is, a moral duty, a suitable behavior rather than a strong necessity: *non quia necesse fuerit, … sed quia sic oportuerit*, (Cic. *Verr.* II 5,37); *quasi non modo liceret sed etiam oporteret, nec solum*

21. *Necesse est* indicates "la nécessité à laquelle il est impossible de se soustraire" (Ernout & Meillet [1994] s.v.).

oporteret sed plane necesse esset (Cic. *Verr.* II 3,181). And the meanings listed in the *OLD* (s.v.) are: “It is demanded by some principle or standard, it is proper, right, requisite, etc.”; “(in confident prediction) It is bound to happen, it is inevitable (that)”; “(expr. the presumed certainty of a fact) It must surely be the case, it may reasonably be expected (that)”.

Notions such as prediction, inevitability, presumed certainty, and expectation clearly indicate that referring the term modality uniquely to possibility and necessity amounts to a relatively restrictive use, which fails to account for some other concepts frequently subsumed under this domain, in particular volition and intention.

5.5.1 Prediction and predestination

In the previous discussion of dynamic modality (Section 2.2), for instance, we mentioned the notion of willingness (Palmer 2001: 9–10), and we also said that will and wish are traditionally meant to explain the original functions of the IE subjunctive and optative (Section 3.3.3). Whatever the role of these concepts with respect to mood might have been, it is in any case arguable whether they belong to the category of modality, which according to some linguists (Heine 1995, Narrog 2005) should be widened to include a further type, the “volitive” modality (also called “boulomaic”, Kiefer 1994: 2517, or better “bouletic”, Palmer 1986: 12), which subsumes volition and intention.

The latter term suggests not only the ideas of desire, wish, and willingness, but also the sense of expectation, and identifies a modal domain that is in intermediate position between necessity and possibility. Generally, modalities expressing intention predicate volitional conditions on the participant engaged in the state of affairs.

Participant-internal intention, which expresses the participant’s willingness to engage in the state of affairs, corresponds to a statement of intentions in first person and normally requires a source meaning directly related to the notion of desire, such as the semimodal verb *uolo* ‘will’ (Section 3.7) that developed “desire”-futures in Romance languages.[22]

Participant-external intention, on the other hand, refers to circumstances that are external to the participant engaged in the state of affairs; but a state-

22. Cf. Bybee, Perkins, and Pagliuca (1994: 254–257).

ment of intentions in other persons, especially with regard to a third person, corresponds to a prediction (Bybee, Perkins, and Pagliuca 1994: 256) about situations that can be simply prearranged to take place, or inevitable. Inevitabilities and situations that are dependent on the "authority" of destiny can also convey the sense of predestination.

This notion, though not mentioned often in grammars,[23] constitutes an important connection between the modal domains of necessity and intention, because the sense of destiny or what is to be is "closely related to obligation and often conflated with it" (Bybee, Perkins, and Pagliuca 1994: 186).

5.5.2 Necessity and intention

The path from necessity to intention, attested for English *shall*,[24] is observable for *oportet* as well. In fact, the *ThlL* mentions the frequent use of *oportet*, in proverbs and maxims, as in (22), and also its typical *usus iudicialis*, listing many examples of laws.

(22) Plaut. *Amph.* 78: *uirtute ambire* ***oportet***, *non fauitoribus*
'by merit, not by patrons, should we seek political support'

Both suggestions from a wise authority and laws are normally expressed by *oportet* because, as Cicero points out, this impersonal form precisely refers to the accomplishment of an action whose validity is everlasting and general: *oportere, perfectionem declarat officii, quo et semper utendum est, et om-*

23. The notion of predestination is mentioned for the first time in Benveniste's discussion of the Latin periphrastic construction of infinitive + *habere*. In his opinion, this syntagm, which became the Romance synthetic future, "served to indicate the predestination of the object to follow a certain course of events. This is a novel and distinctive semantic hue, totally divorced from the purposive value often associated with the future tense" (Benveniste 1968: 90).
24. "In Old English, both *shall* and *should* (the Present and the Preterite forms of *sculan*) were used to report both moral and physical obligations and inevitabilities. In Middle English, *shall* was used more frequently in the first person to make promises and state intentions, but *should* continued to be used primarily in the third person to report past destiny and inevitabilities" (Bybee, Perkins, and Pagliuca 1994: 187). It is not surprising, moreover, that the notion of obligation can develop future meanings via intention (ibid. 263).

nibus; decere, quasi aptum esse, consentaneumque tempori et personae (Cic. *orat.* 22,74).

This kind of solemn formula actually entails a prescription rather than a necessity:a proposal or a plan that offers directions about appropriate behavior in future situations. As a matter of fact, in Cato *oportet* is frequently followed by the "future imperative", which looks forward to expected, but not immediate, fulfilment; an example is in (23):

(23) Cato *agr*. 24,1,1: *uinum Graecum hoc modo fieri* ***oportet****: uuas apicias percoctas bene legito*
'the Greek wine will be done this way: you shall carefully choose mature apicia grapes'

Also expressed in first person, the statement of an obligation implies that the speaker intends to fulfill the action soon, as can be seen in (24), which describes a forthcoming action involving both participant's intention and necessary conditions:

(24) Plaut. *Amph*. 268–269: *itaque me malum esse* ***oportet****, callidum, astutum admodum, / atque hunc, telo suo sibi, malitia a foribus pellere*
'and so, I have to be a skillful rogue, very clever, and drive him away from the door with his own weapon, crookedness'

The contexts in which obligation implies situations prearranged to take place explain the connection between necessity and intention. And when this implication entails inevitabilities, we have the shift from participant-external necessity to predestination, as in (25):

(25) Plaut. *Amph*. 316: *alia forma esse* ***oportet*** *quem tu pugno legeris*
'he is destined to be of a different shape, the one with whom you pick a fight'

It is also arguable that this development is consequent to the fact that the lower the force of a directive sentence is, the stronger the sense of expectation the deontic modal conveys.

Thereafter, the generalization of the contexts in which the intention is expressed leads to prediction, which is a statement of intentions not in first

but in other persons. But a “confident prediction” may also involve a sense of probability, as in (26):

(26) Plaut. *Capt*. 283: *nunc uiuat⟨ne⟩ necne, id Orcum scire* ***oportet*** *scilicet*
'whether he is living now or not, Hades, indeed, must know that'

Presumably, for *oportet* the shift from event modality to propositional modality takes place this way, but also directly from necessity to inference, and for that reason epistemic senses developed so early and are so frequently attested in Plautus.

6. From event modality to propositional modality

6.1 A semantic map for Latin modal forms

One of the basic tenets of grammaticalization theory is that grammatical meanings evolve along particular paths propelled by certain common mechanisms of change. Putting together the leads and the modal paths offered in Bybee's works (1985; Bybee, Perkins, and Pagliuca 1994) and in other studies, van der Auwera and Plungian (1998) outlined a semantic map, which is a geometric representation of cross-linguistically relevant connections among premodal, modal, and postmodal meanings and uses. Meaning change and polyfunctionality are the diachronic and synchronic links that determine the shape of the semantic space and the direction of the paths portrayed in the map. These paths describe some universal grammaticalization chains, with non-uniform lexical input and restricted grammaticalized output.

The premodal sources of modality, represented as abstract notions or lexical elements, develop modal meanings through semantic generalization or specialization. Basically, the more general the source meanings are, the higher the chance that the change through specialization takes place. On the other hand, the more specific the premodal meanings are, the higher the chance that the change through generalization takes place (van der Auwera and Plungian 1998: 93).

This investigation of Latin modal forms not only confirms these insights and predictions, but also expands the map by adding the domain of intention.

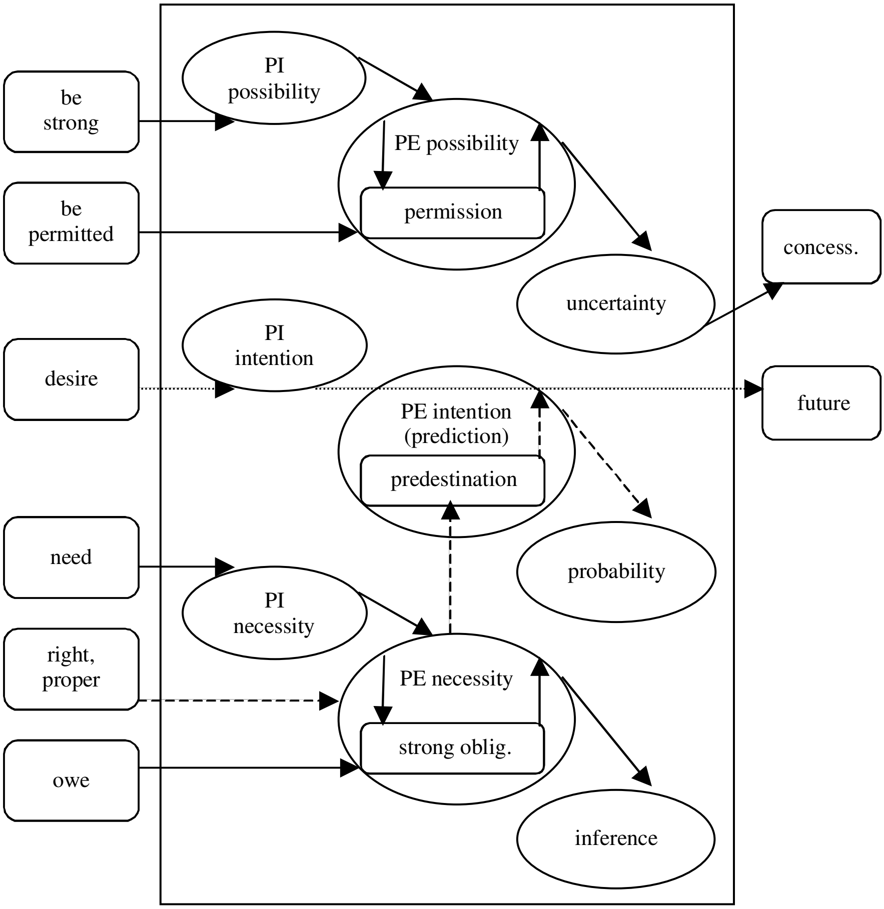


Figure 1. A semantic map of Latin modal forms (PI = participant-internal; PE = participant-external)

The diachronic paths of the modal forms discussed so far are sketched in Figure 1 and recapitulated in the next paragraph. Premodal source meanings are on the left; the rectangle in the middle contains the modal domain; (some) postmodal meanings are on the right.

6.1.1 Modal paths

The evolution of *possum* is an example of the commonly documented development of verbs which predicate mental or physical capability being extended to cover ability, and then becoming general markers of possibility (Bybee, Perkins, and Pagliuca 1994: 190; Bybee 2003: 606). Moving from the source 'be strong', the arrows on the map touch several steps: dynamic possibility first, then participant-external possibility, where a development toward the subdomain of deontic possibility takes place, and then epistemic possibility (i.e., uncertainty).

The verb *liceo* 'release, permit' in the impersonal form represents the direct source for deontic possibility, and then it generalizes its uses into the wider domain of participant-external possibility. In Early Latin the verb is predominantly a deontic modal, and epistemic meanings are still rare in Classical Latin (Núñez 1991: 184–186); the concessive value of the construction *licet* + subjunctive, however, increases in the works of Seneca, Pliny, and Quintilian, and *licet* is commonly used as conjunction from Apuleius on (Purnelle 1998, 2001). To become a conjunction, a form must have most of its meaning eroded, and this starts to happen when *licet*, used as the reply to a request or command, means simply 'yes, ok' (see, e.g., Plaut. *Rud.* 1212–1227).

The form *necesse* is the neuter of an adjective meaning 'necessary'. The source 'need' normally feeds into the domain of necessity; in this case, however, participant's internal needs are expressed by the impersonal phrase *opus est*, whereas *necesse est* is first used for participant-external necessity, and then for inference.

With respect to the impersonal verb *oportet*, the ancients used to connect it with *opportunus* 'right, proper'. As van der Auwera and Plungian point out (1998: 95), in many languages this lexical source tends to skip the participant-internal dimension and to become a direct source for participant-external necessity. Since obligation is closely related to the sense of destiny or what is to be, a shift toward the domain of intention takes place (see the dashed arrows), and from the specific meaning of predestination a change through generalization leads to prediction. Epistemic senses rapidly arise from uses for both prediction and obligation as well.

As for the modal verb *debeo*, Bolkestein (1980: 5) affirms that the notion of 'owing' is not always such an important component of its meaning. This form, however, confirms the well-known development of obligation constructions from verbs with the meaning 'owe', also attested for Eng. *shall*. This notion tends go directly to the deontic subtype of participant-external necessity and, later still, it generalizes and moves toward epistemic inference.

6.2 Generalization, Repetition, and Grammaticalization

Bybee, Perkins, and Pagliuca (1994: 195) suggest that the force of the epistemic sense expressed by a modal verb, its proximity to *realis*, is directly related to the force of the premodal sense from which it derives. Thus it can be said that premodal sources crucially determine the shape and direction of the paths and make the evolution of grammatical meanings cross-linguistically predictable.

Generalization, or bleaching, is a process by which "specific features of meaning drop off, leaving a semantic core" and seems to characterize the entire grammaticalization continuum (Bybee 2003: 605–607). One of the mechanisms related to generalization is repetition (Haiman 1994): when forms become more general and abstract in their meanings, they are more widely applicable and more frequently used in fixed contexts. *Licet*, for instance, in Plautus rarely occurs with cognition verbs, as in (27):

(27) Plaut. *Pseud.* 16: ***licet** me id scire quid sit?*
'am I permitted to know about it?'

But in Lucretius it is found 16 times out of 47 in the phrase *scire licet*, which from Plautus on had already started to grammaticalize into the modal adverb *scilicet*.

Indeed, a much-noted property of grammaticalization is that semantic change is connected with formal change, and this can be seen in the evolution of *possum*. Starting from the expression *potis* + *sum*, it shows a rapid semantic change that goes, at least initially, hand in hand with formal grammaticalization. It has also been suggested (van der Auwera and Plungian 1998: 114) that, when epistemic modality develops from non-epistemic modality,

a further step toward increasing grammaticalization is the use of invariable, impersonal expressions instead of fully inflected forms, such as *potis est, pote est*, and *potest*. In Classical Latin, moreover, the phrase *potest fieri ut* + subjunctive, like the Italian and French expressions *può darsi che* and *il se peut que*, is commonly used in epistemic sentences (Orlandini 1998):

(28) Cic. *epist*. 13,73,2: *mihi ita persuadeo (**potest fieri ut** fallar) eam rem laudi tibi potius quam uituperationi fore*
'but I am persuaded (I may be wrong) that such action will bring you commendation rather than criticism'

As we have seen in (19), also for the impersonal expression *necesse est*, the increasing grammaticalization is announced by the univerbation of the form.

7. Mood and event modality

7.1 The realis/irrealis dimension

As mentioned in Section 3.4, the category of mood is primarily related to the basic divide between *realis* and *irrealis*, which is often depicted as a well-defined set of binary distinctions and in particular as the contrast between the mood of direct assertion and the mood of non-assertion: "Subjunctive mood is a combination of *irrealis* and particular illocutionary force notions, while indicative is declarative *realis*" (Van Valin and LaPolla 1997: 42).

As a matter of fact, given that "there is no typological difference between indicative/subjunctive and realis/irrealis" (Palmer 2001: 5), "this contrast is rarely realized in a language as a binary morphological distinction" (Bybee, Perkins, and Pagliuca 1994: 237–238). In this respect, the Latin mood system is not strictly binary, due to the presence of imperative, subjunctive, and also traces of optative forms. Moreover, the *realis/irrealis* dimension involves many different notions and is correlated not only with Illocutionary Force, but also with different operators such as Negation and Tense (Section 2.4; Givón 1994: 269–277, Palmer 2001: 185–191).

The decision to treat the relationship between the moods and the *realis/irrealis* dimension as essentially reflecting the distinction between assertion and non-assertion rests largely on the fact that the modal functions in different speech act types are more simply explained than their distribution over the various grammatical contexts.

In the following discussion of event modality, we consider the use of the moods in directive sentences, which are closely associated with deontic meanings and, since their illocutionary potential is modulated from obligation to permission, are clearly related to the concepts of necessity and possibility. It is worth noting, however, that these notions have an asymmetric relationship with the *realis/irrealis* dimension, because if someone is obliged to carry out an action, we may infer a high likelihood that the event will become a reality; but if the participant is merely able or permitted to perform it, we may not infer such a strong probability, and the event is just possible or uncertain. To make the point in a better way, it may be said that "there is a semantic relation between *realis* and necessity, and *irrealis* and possibility" (Van Valin and LaPolla 1997: 41). Consequently, imperative, prohibitive, jussive, exhortative, optative, and permissive sentences constitute a continuum where the strongest directives, which involve necessity and immediate fulfilment of the action, are closer to *realis*, while milder requests, wishes, and permissions, which portray just hoped-for, possible outcomes, are closer to *irrealis*.

The moods other than the indicative can express all these various shades, partly contrasting and partly overlapping with each other. This section deals with a number of issues relating to both the semantic characterization of the subjunctive and its distribution within *irrealis*.

7.2 Irrealis and the subjunctive

According to Givón (1994), *irrealis* goes from the deontic manipulative side to the epistemic side of a scale, and the moods occupy cross-linguistically coherent and predictable loci on these two main subdimensions. The imperative, which is the semantically unmarked term within the deontic system, is strictly related to strong manipulation and necessity and is thus in a transition region, on the borderline between *realis* and *irrealis*. The subjunctive, on the other hand, turns out to cover a wide portion of *irrealis* between weak intended manipulation and low epistemic certainty (Givón 1994: 276–280)

and is thus characterized by greater functional variety and semantic vagueness; "it might be said that the subjunctive has a very general meaning such as 'non-asserted' and then it takes more specific meanings from the context in which it occurs" (Bybee 1985: 186).

These universal features suggest that the complexity of this mood in Latin is presumably independent of its origin, and the numerous labels traditionally employed for classifying its different meanings and functions correspond to the various senses and utterance types situated between the two subjunctive foci mentioned above. Furthermore, it may be argued that the semantic vagueness of the subjunctive reflects its centrality not only within *irrealis*, but also between the basic modal meanings.

7.3 Possibility, necessity, and intention

As noted in the preceding discussion (cf. Sections 3.5 and 3.8), the Latin subjunctive shares with the modal verbs the property of expressing not only deontic and epistemic meanings, but also necessity and possibility, both in main and subordinate clauses. The subordinating uses of the subjunctive, however, can be considered the last stage of its evolution, for they show up very late on the grammaticalization chain (Bybee, Perkins, and Pagliuca 1994: 213), developing out of the uses in main clauses, which are therefore to be considered first.

As we have seen, Núñez (1991: 217) refers all the uses of the subjunctive to necessity and possibility, but if "the use of a subjunctive or optative resulting from the speaker's 'intention' not to put forward the process as fact is often determined by his 'conviction', belief or assumption that the realization of the process is desirable, possible, necessary" (Gonda 1956: 7), the ideas of will and wish also turn out to be relevant. In fact the following sentences suggest that other concepts have to be considered in addition to necessity and possibility:

(29) a. Plaut. *Cas*. 642: *pectus, auris, caput, teque di* ***perduint!***
'may the gods ruin your breast, your ears, your head, and you!'

b. Plaut. *Capt*. 551: *proin tu ab istoc procul* ***recedas***
'so stay far away from this man'

The humorous imitation of a *defixio* in (29a) is basically the expression of a desire, a wish whose fulfilment depends on the gods; therefore the curse is more a prediction than a possible outcome. And (29b) also seems to express participant-external intention rather than necessity: since the man to avoid is ill, the sentence is a prescription and not an obligation.

It is thus evident that the three domains of intention, possibility, and necessity are pertinent to the analysis of the Latin subjunctive. These concepts, however, are not on an equal footing on a synchronic, and maybe also a diachronic, level.

7.4 The subjunctive of weak manipulation

If we accept the view that independent uses and event modality represent the first stage in the evolution of the subjunctive, deontic functions and meanings turn out to be its prototypical and archetypal core.

In traditional grammars, independent subjunctives expressing deontic meanings have been interpreted and classified in different ways; in particular the volitive and the desiderative uses plus their various subtypes (Calboli 1966–1968: 268–276), respectively referred to the notions of will and wish, are often assumed to reflect the primitive "subjunctive functions" and "optative functions". However, given the puzzling distribution and the controversial origin of the different formations collapsed in the Latin conjugation (cf. Section 3.3.3), this distinction remains an unrealistic goal, and it is merely an exercise in ingenuity to attempt to trace a chain of development and to elucidate the chronological relations of the various uses.

One way out of the dilemma is to explain the semantic vagueness and the functional complexity of this mood by making reference to intention, which subsumes the two notions focused in Delbrück's hypothesis and also involves the idea of "visualization" (i.e., future-projection) already propounded by Gonda.

In fact, will and wish, whatever their role and position might have been in the Indo-European verbal system, naturally merge into the broader domain of intention, whose intermediate position between necessity and possibility (see Figure 1) allowed developments in both directions, which are reflected in the functional variety and wide range of *irrealis* regions occupied by this

mood. Intention, on the other hand, also encompasses the sense of expectation, which seems to explain the fact that "both the optative and especially the subjunctive had a future orientation" (Baldi 2002: 400).

Even if we leave open the question whether the Latin subjunctive represents a fusion of two separate Indo-European moods, it may thus be argued that the semantic core of the subjunctive is intention, which corresponds functionally to the subjunctive of weak manipulation. On this interpretation, all the specific functions of the subjunctive are aspects of this essential character; hence the numerous uses variously labeled in grammars cannot be interpreted as reflecting *tout court* different basic meanings (Müller-Wetzel 2001: 40–45). The individuation of the uses related to necessity or possibility, moreover, is often a delicate and subjective one, because the precise nature of the intended manipulation depends after all "on context, situation, intonation, meaning of the verb etc., and in spoken language also on gestures" (Gonda 1956: 70).

Following this train of reasoning, it may also be said that the main difference between modal verbs and subjunctive lies in the fact that the first ones express precise shades of necessity and possibility, while the second one codes more vague meanings that are specified by the context (Müller-Wetzel 2001: 139–145).

7.4.1 Volitive (exhortative, jussive, prohibitive) subjunctive

The volitive subjunctive is thus semantically related to intention and corresponds functionally to weak intended manipulation; in fact, "Intention on the part of the speaker is generally expressed by means of fut. indic. There are, however, good reasons for thinking that pres. subj. also was at one time used in this sense" (Handford 1947: 38). With the indicative mood, participant-internal intention usually corresponds to a statement of intention; with the present subjunctive, occasionally used in first persons, it gives expression to a self-exhortation, as for instance *eamus*[25] in Plaut. *Amph.* 543.

The jussive function naturally occurs in the second and third persons and is used to express positive instructions, requests, advice, and encouragement.

25. In Early Latin, about one half of the affirmative examples of the hortatory subjunctive consist of *eamus, adeamus, abeamus*, or other compounds of *eo* (Bennett 1910: 167).

In second person (the plural is rare) the tense is always present (*memineris* in Cic. *epist.* 15,17,4 is no exception, being equivalent to a present); very common in Early Latin, in Classical Latin this use of the subjunctive persisted as an archaism in official documents and poetry, but also in colloquial language (Cic. *epist.* 16,9,4: *cautus sis, mi Tiro*). Referring to a third person the present subjunctive is common in all periods, whereas the perfect subjunctive is frequent in Classical Latin with passive verbs.

It has often been stated that, compared with the imperative, the jussive subjunctive is a milder way to express directive sentences: "The force is so weakened or modified as to convey simply a warning, admonition, or request" (Bennett 1910: 162). Moreover, it is frequently attested in giving general instructions and precepts of general application, and in addressing an indefinite person, as in (30).

(30) Cic. *off.* 1,114,2: *suum quisque igitur* ***noscat*** *ingenium*
'so each one should know his mind'

For Handford, however, the evidence does not support either of these assertions, for the meaning of the jussive subjunctive is, in most cases, indistinguishable from that of the imperative (Handford 1947: 42–43). This semantic distinction, also denied by Hofmann & Szantyr (1965: 335), is probably obscured by the fact that the subjunctive expanded its uses at the expense of the imperative in *-to*, which is still found in archaic legal texts, maxims, general precepts, recipes and the like, as a personal directive, universally oriented, and referred "to a non-immediate future, as it is embedded in future-time contexts" (Rosén 1999: 115).

We can thus hypothesize that, before the decline of this form,[26] the deontic use of the subjunctive took part in a three-way contrast of manipulative strength as follows (adapted from Givón 1994: 298):

(31) a. Strong manipulation:
Plaut. *Cas.* 977: ***i*** *in malam crucem!*
'go to utter ruin!'

26. Only a few verbs are regularly used in this form in all circumstances, e.g., *scito*, *memento*, and often *habeto*.

b. Weaker manipulation:
Ter. *Ad.* 582–583: *ubi ad Dianae ueneris,* ***ito*** *ad dextram*
'when you come to the temple of Diana, turn to the right'

c. Weakest manipulation:
Plaut. *Men.* 328: *ut* ***eas*** *maximam malam crucem*
'may you go to utter and extreme ruin'

While the imperative is employed to convey a sense of obligation and immediate necessity (31a) , both the "future-imperative" and the subjunctive express willingness and projection – participant-external intention that, in directive sentences, may correspond to a formal recommendation/instruction about future situations, as in (31b) , or to a simple toned-down manipulation, as in (31c) .

Already in Early Latin, however, the transition along the relevant portion of *irrealis* was less gradual in terms of the verb form employed, and the contrast was reduced to the choice between the strong-manipulative imperative and the weak-manipulative subjunctive. The difficulty in separating the uses of the two forms is due partly to the fact that the subjunctive subsumed the functions of the imperative in *-to* (see the impersonal uses, as in (30)), and partly to the fact that its interpretation depends on pragmatic and contextual factors (see the uses with adverbial *ut(i)* or other illocutionary devices inserted, discussed by Risselada 1993).

Analogous observations can be made about the prohibitive subjunctive, whose distinction from the jussive consists of the presence of a negation. While in Old Latin prohibitive sentences can also be expressed with the "future imperative" (*ne facito*), in Early Latin the methods in most common use for expressing a prohibition are the negative imperative,[27] normally used to stop a current situation (Plaut. *Capt*. 139: *ne fle* 'stop crying'); and *ne* with present (*ne facias*) or, especially addressing a second person, perfect subjunctive (*ne feceris* and also *ne faxis*).[28] Within this system, only the last form

27. This type is not used in Classical prose but is common enough in colloquial texts and in poetry (25 examples in Virgil).
28. According to Handford (1947: 22), while *ne facias* is a normal form of command, negativized, *ne faxis* (later replaced by *ne feceris*) is an inherited form of prohibition, a usage descended from the remote antiquity of the injunctive. This special form dedicated to

and the periphrases *noli*, *nolite* + infinitive survive in Classical Latin "as two equally standing negative counterparts of the imperative" (Rosén 1999: 114).

7.4.2 Desiderative (optative) and potential (permissive) subjunctive

The lack of a clear-cut distinction between will and wish has been used as an argument in the controversy regarding the origin of the Latin subjunctive; as a matter of fact, Delbrück's critics are not necessarily wrong in considering these notions as two facets of a single meaning. Nevertheless, the fact that some languages employ different moods to express them indicates that there is some recognizable distinction. Basically, when participant-internal intention corresponds to a wish, we have the expression of desire pure and simple, without implication of realizing by human effort or activity the situation described (Plaut. *Asin*. 418: *utinam nunc stimulus in manum mihi sit* 'I wish I had a prod in my hand now').

In Early Latin the desiderative subjunctive is extensively used in expressions of cursing and praying in second and third persons, such as *di te ament, di te perdant, di faciant, di dent, saluos sis,* etc.; there are oft-recurring formulas where some ancient true optative forms are preserved, such as *uelim* (*nolim*, *malim*), *siet*, etc. (Ernout & Thomas 1951: 207–208); but subjunctive forms are employed more frequently: *perduint* and *perduit*, for instance, in Plautus are attested 13 times, while *perdant* and *perdat* are attested 30 times.

The expressions devoid of introductory particles are the starting point of this construction, but in nonformulaic wishes the subjunctive is usually accompanied by *utinam*, *ut*, or *qui* 'O that ... !' in all periods; in Classical Latin, it becomes fixed within the rigid rules of the *consecutio temporum* (Rosén 1999: 109), also manifesting a clear distinction between realizable wishes (present tense referring to the present or the future,[29] and perfect tense

prohibitions survives also in Sanskrit (*mā* + unaugmented past indicative forms) and is partially continued in Greek μή + aorist subjunctive (Wackernagel 1926–1928, 1: 216). See also Vairel (1981).

29. Early Latin did not make as clear a distinction as Classical Latin between the possible and the impossible in the realm of the ideal, and the present subjunctive could also express vain wishes; moreover some *s*-subjunctives and the *faxim* type survived as stereotyped expressions for realizable wishes (Handford 1947: 87–91).

referring to the past) and vain wishes (imperfect and pluperfect subjunctive, respectively referring to the present and the past).

As Mesa Sanz points out (1998), the utterances with *utinam*, especially in second person, are frequently closer to exclamations (Cic. *Verr*. II 3,107: *quod utinam dicas!*), showing that wishes are in a midway position between expressive and directive speech acts. In fact, participant-external intention corresponds to a prediction which, when referred to other persons and involving volitional conditions which are related to a powerful or wise authority, becomes predestination. But when the external circumstances do not imply a controlling and willful entity, the manipulative force is very weak, and the prediction remains just a desired, possible outcome.

According to Hofmann & Szantyr (1965: 333), the potential meaning is an original sense of the Latin subjunctive and is connected with the *wünschender Optativ* via semantic bleaching (*Bedeutungsabschwächung*), whereas for Kroll (1916) it developed in the historical period from the senses of will, wish, and futurity, which three he regards as ultimately one and the same. In both cases, there is no doubt that some of the functions collected under the label potential subjunctive represent a gradual transition from intention to possibility.

On the deontic side, in some cases the intended manipulation is so weak that the subjunctive shades from desire into preference, and from hope into mere acquiescence on the speaker's part (Givón 1994: 299). The development of main clause potential subjunctive, which in Early Latin is "hindered by the common use of the indep. subj. in expression of will" (Handford 1947: 99), probably begins with usages confined first within a narrow range of particular idioms and a few forms whose meaning was less compatible with the functions of the volitive subjunctive.

As to participant-internal intention, for instance, the much-debated[30] forms *uelim, nolim, malim,* which in Plautus are frequently used with an infinitive, a direct object (also plus an adjective or a passive participle), or absolutely,[31] can be interpreted as "softened forms of statement for *uolo*, *nolo*,

30. For discussion of the different hypotheses, see Calboli (1966–1968: 276–279).
31. On the idea of "modal attraction" in the type *ueniat uelim,* see Handford (1947: 100–102).

malo" (Bennett 1910: 198–200). That is, potential subjunctives expressing attenuated desires (Plaut. *Amph.* 1058: *aquam uelim*), or preference/aversion (Plaut. *Capt.* 941–942: *te nolim suscensere* 'I wouldn't like you to be angry'), which differ from the indicative only in being milder or more deprecating (Handford 1947: 99–106, Ernout & Thomas 1951: 201).

Referred to second or third persons, on the other hand, the subjunctive may express mere compliance (in a few formulaic expressions such as *fiat*, *mos tibi geratur*, etc., Bennett 1910: 176), permission (Plaut. *Most*. 772: *inspiciat, si lubet*; Plaut. *Bacch*. 224: *ueniat quando uolt*), or simple possibility, as in (32):

(32) Plaut. *Amph*. 1060: *nec me miserior femina est neque ulla* ***uideatur*** *magis*
'a woman more miserable than me does not exist, is there one who even seems to be so'

In Early Latin the *can*-potential seems in fact to be narrowly restricted in its range, limited to verbs of knowing and perceiving, at first always in the generalizing second person singular: see for instance *scias*, *uideas, audias,* and similar expressions (Bennett 1910: 206–207), as in (33):

(33) Ter. *Andr*. 460: *fidelem haud ferme mulieri* ***inuenias*** *uirum*
'you cannot easily find a man faithful to a woman'

According to Handford, in all such subjunctives the potential sense is attenuated and there is little or no modal force ('you cannot easily find', he says, is very close to 'you do not often find'), but Classical authors retained in use all the stock idioms of Early Latin because of a conventional association between the ideal second person singular and the subjunctive (Handford 1947: 108–110).

For Bennett, weakened potentials such as *credas*, *censeas*, and the like, which hover between the 'would' and the 'can' meaning, are the probable origins of this usage. We are inclined, however, to consider this development the other way around: since the expressions with non-individuated participants and uncontrollable states of affairs allow the epistemic reading as well (e.g., 'you may scarcely find'), most of the potential subjunctives in the indefinite second person singular tended to be interpreted as expressing prospect or

uncertainty rather than objective possibility. In fact, given the privileged relationship between possibility and *irrealis* (Section 7.1), the uses related to low epistemic certainty represent the subdomain where the potential subjunctive was most likely to spread.

8. Mood and propositional modality

8.1 Subjunctive and futurity

"One way of interpreting the widespread and largely uni-directional development of epistemic modal senses from earlier deontic senses is by invoking semantic markedness and semantic bleaching" (Givón 1994: 275). In this respect, event modality is the marked case, for it carries both deontic values and an inherent sense of futurity, which by definition involves epistemic uncertainty. Consequently, the evolution toward propositional modality can be viewed as the loss of a semantic feature, which leads from the marked (deontic) to the unmarked (epistemic) side of *irrealis*.

Our attention in this section is directed toward explaining how subjunctive forms originally signaling event modality gradually come to express propositional modality in main clauses.

8.2 The subjunctive of low epistemic certainty

As argued in Section 7.2, "the two main-clause contexts where subjunctives most commonly appear divide predictably into the two sub-modes of *irrealis* – the deontic subjunctive of weak manipulation and the epistemic subjunctive of low certainty" (Givón 1994: 298). On this interpretation, the various subjunctive types mentioned in traditional grammars can be conceived of as covering different points along the two scalar subdimensions of *irrealis*.

If we accept the view that the core notion of the subjunctive is intention, we can consider the expression of deontic meanings as more basic on a diachronic level. The volitive subjunctive, on the one hand, expands toward necessity, contrasting with the imperative in the jussive and prohibitive functions. The desiderative subjunctive, on the other hand, expands toward

possibility, contrasting with the indicative in expressing preference and permission.

The future-projecting feature implicit in the notion of intention, however, characterizes both subjunctive types, which are thus used in manipulative speech acts depicting events that have not yet occurred, but they can also appear in epistemic sentences expressing various degrees of uncertainty. The subjunctive types described in the following paragraphs illustrate the uses related to low epistemic certainty.

8.2.1 Potential subjunctive

For want of a better name, the label potential subjunctive collects a set of functions that, inherited in a more or less developed form, bridges over the two subjunctive foci, ranging from the weakest deontic force to the lowest epistemic certainty.

As we have seen (Section 7.4.2), in the transition from intention to possibility, the subjunctive occurs in sentences whose manipulative strength is minimal; but when the deontic sense is lost, what remains is the sense of futurity, which underlies most of the uses of the potential subjunctive, and particularly the expression of epistemic uncertainty. In fact, both the *may*-potential and the *should/would*-potential "are phases of the category of future contingency" (Bennett 1910: 205).

With the *may*-potential the idea of future contingency depends "upon nothing in particular but upon things in general" (Bennett 1910: 206), as for instance the forms *fuat* and *sit*, crystallized in the phrases *fors fuat (an)* and *fors sit (an)* 'there may be a chance (whether)', 'it may be that', usually followed by another subjunctive. The latter expression, moreover, was bound to grammaticalize into the adverb *forsitan*, regarded as equivalent in meaning to *fortasse* after the Augustan age (Handford 1947: 112–113).

The *may*-potential, which is quite restricted in its range, occurs also in the various phrases meaning 'someone may say/ask', as in (34).

(34) Liv. 9,4,12: *quid habent quod morte sua seruent? Tecta urbis,* ***dicat*** *aliquis*
'what do they have to preserve by their deaths? The roofs of the city, someone may say'

In this particular expression the perfect form is commoner, and the type *dixerit quispiam* (*quis*, *aliquis*), which starts with Catullus (67, 37: *dixerit hic aliquis*) and is frequent in Cicero, has been explained as modeled on the Greek aorist optative, such as ἔιποι τις ἄν (Ernout & Thomas 1951: 201). As Handford puts it, however, "There is nothing to show whether these forms are fut. perf. indic. or potential perf. subj., and it is likely that the Romans themselves would have no clear opinion on the matter" (Handford 1947: 115). In any case, in sentences in which no condition is expressed, there is no observable distinction in sense between the present and the perfect tenses, both implying that the event may yet take place.

It is the imperfect potential subjunctive, on the other hand, that is normally used to convey the speaker's opinion as to what was likely to happen in the past (Afran. *com.* 9: *mare caelum terram ruere ac tremere diceres*). It must be said, however, that it cannot always be clearly separated from the *should*/*would*-potential, and in many cases either rendering is equally appropriate (Liv. 2,43,9: *crederes uictos* 'you might/would have thought they were a defeated army').

On the whole the range of situations in which the *should*/*would*-potential occurs without a condition being implied is very limited:

(35) Cic. *Att.* 4,17,4: *cuperem* ***uultum*** *uidere tuum cum haec legeres*
'I should like to see your face, as you read this'

In fact, "the *should*/*would*-potential belongs naturally to apodoses, because it is peculiar among modal senses in tending, by itself, to be incomplete in meaning" (Handford 1947: 99).

Thus, already in Early Latin, in the great majority of cases it constitutes the apodosis of a conditional sentence, with a protasis normally introduced by *si*, *nisi*, *ni*. Both the present and the perfect subjunctive look forward to the future, describing "a future contingency which will be realized in case some special act, more or less clearly indicated, is fulfilled" (Bennett 1910: 205). Very frequently the present tense has a counterfactual force (Plaut. *Asin.* 393: *si sit domi, dicam tibi* 'If he were at home, I would tell you'), like the imperfect tense, whose usage in apodoses probably originated from a narrowly restricted range of verbs employed outside of conditional sentences, in particular *uellem* and *mallem* used to express a regret (Bennett 1910: 202–204).

This subjunctive form is rarely used referring to the past, as does the pluperfect.

8.2.2 Dubitative (deliberative, repudiating, exclamative) subjunctive

Questions are the other nondeclarative clause type that is inherently under *irrealis* scope, for it is characterized by low epistemic certainty.

The dubitative subjunctive, which may be introduced by the usual interrogative pronouns and adverbs, or occur without introductory particles at all, expresses duty or fitness in questions addressed to someone else (Plaut. *Epid.* 588: *non patrem ego te nominem?*). It is labeled "true" deliberative when the speaker is soliloquizing, "actually deliberating with himself as to what course of action he shall pursue" (Bennett 1910: 184), and addressing the question to himself (Plaut. *Mil.* 305: *quid ego nunc faciam?*). In repudiating questions and exclamations the speaker manifests scorn, indignation, or disdain at some command or proposal which has been suggested to him, often replying with an echo-clause (Plaut. *Mil.* 496: *ausculta quaeso. ego auscultem tibi?* 'listen, please. Should I listen to you?').

Whether these uses are to be referred to the volitive subjunctive as an interrogative type of jussive sentence is a question that has been raised, and answered positively, by many scholars (Bennett 1910: 179–181, Kroll 1916: 143, Handford 1947: 62–82, Hofmann & Szantyr 1965: 338). If it is beyond doubt that the last example implies a sense of obligation, it must be also admitted, however, that the other two questions in the last paragraph are ambiguous between necessity and possibility. Hence, Ernout & Thomas (1951: 204) suggested a mixed origin from the volitive and potential types.

But for Gonda the origin of the dubitative subjunctive is a pseudo-problem, because it is simply an aspect of "visualization", "used when a speaker, in case of embarrassment, irresolution, difficulties, etc. holds, in the form of a question, before his mental eyes ... what could be done" (Gonda 1956: 82). In other words, it chiefly expresses the idea of future-projection inherent in intention, but also low certainty and anxiety (Givón 1994: 323).

It is also worth noting that in contrast to the indicative mood, which is used in all periods in Latin, in both future (Plaut. *Capt.* 535: *quid loquar? quid fabulabor?*) and present tense (Catull. 1,1: *cui dono lepidum nouum libellum?*), the subjunctive has a strong epistemic component of unexpected-

ness, and normally signals a higher degree of emotional involvement (Givón 1994: 306–307).

9. Subjunctive and subordination

9.1 From parataxis to hypotaxis

As mentioned in Section 3.3.3, the subjunctive is typically associated with subordination. Subordinate clauses originate in the side-by-side placement of two independent sentences (parataxis), one of which came to be felt as dependent on the other (hypotaxis). Although there is some difficulty in drawing a clear line between coordination and subordination,[32] the latter is basically signaled by two types of marker: introductory conjunctions and mood.

According to Palmer (1986: 132), subordinate moods often reflect the mood of an independent clause; consequently, a clause that in parataxis would have required one of the types of independent subjunctive will also have the subjunctive when it is subordinated.

Since a subordinate clause may be the equivalent of a noun, an adverb, or an adjective, in this section we analyze the distribution of subjunctives in noun clauses (or complement clauses) and in adverbial clauses; the third type, which is the relative clause, is discussed in Pompei, this work, vol. 4.

9.2 Subjunctive in complement clauses

One common syntactic context in which subjunctive forms are found is complement clauses (see Noonan 2007). In this respect, historical and cross-linguistic data support the hypothesis that deontic and epistemic modals "are originally used in complement clauses with the same meaning as they have in main clauses", and that this usage "is originally motivated by a certain harmony between the meaning of the modal and the meaning of the main verb" (Bybee, Perkins, and Pagliuca 1994: 214).

32. For a critical discussion of the relation between parataxis and hypotaxis in Latin, see Haudry (1973).

The Latin subjunctive, as we have seen, has main clause uses in exhortative, jussive, and prohibitive sentences, as well as for the expression of wishes, desires, permissions, and epistemic possibility. Thus, its complement clause uses under verbs of wanting and ordering are harmonic with the main clause deontic uses referred to the volitive type; and also the subjunctive with verbs of hindering and preventing, which can be considered negative counterparts to ordering, is harmonic with the uses in prohibitive sentences.

The noun clauses of indirect command or request are obviously developed directly from the volitive subjunctive. They stand as object or, if the verb is passive, as subject, to the *verba studii et voluntatis*, verbs (and phrases) of willing, commanding, requesting, warning, advising, resolving, contriving, or the like (e.g., *uolo*, *impero, rogo, peto, postulo, suadeo, hortor, moneo, statuo, constituo,* etc.), and are generally introduced by *ut* or (*ut*) *ne*, but the type without introductory conjunction, used in all periods, clearly indicates that the origin might be paratactic:

(36) Ter. *Andr*. 418: *hodie uxorem ducas, ut dixi,* ***uolo***
'I want you to get married today, as I have said'

The paratactic prototype of the *ne*-clauses under verbs and phrases of hindering, preventing, forbidding, and refusing is illustrated by sentences like Plaut. *Cas*. 634: *ne cadam, amabo, tene me*, where the subjunctive is probably independent ('don't let me fall, please, hold me'), but it might also be interpreted as dependent on *tene* ('hold me from falling'). Many verbs of preventing and refusing also take *quominus*, absent in Plautus, rare in Terence, and especially common from the time of Cicero; *quin* is used when these verbs are negativized or questioned.

Clauses dependent on verbs and expressions meaning wish, desire, pray, and hope,[33] on the other hand, can be taken as harmonic with the main deontic uses referred to the desiderative subjunctive. Often they have no introductory

33. As pointed out by Palmer, however, there is a contrast with verbs of wishing and hoping. In Spanish and Italian both occur with a conjunction plus the subjunctive, but in Latin the verbs of hoping are more frequently found with an infinitive complement, and this "may reflect the fact that hopes are more likely to be realized than wishes – and so less likely to be marked as *Irrealis*" (Palmer 2001: 192); see also Section 9.2.1..

conjunction (Plaut. *Persa* 293: *eueniant uolo tibi quae optas* 'I wish that those things you ask for come to you') but can occasionally be introduced by *ut* (Plaut. *Rud*. 640: *te digna ut eueniant precor* 'I pray that things which you deserve may come to you'), rarely by *ne*.

According to Handford (1947: 89), the use of *ut*-clauses after verbs of fear also derives from positive wishes (Plaut. *Persa* 319: *metuo ut possim* 'I fear I may not be able' from *metuo*: *ut possim* 'I am afraid: may I be able!'). Negative clauses are introduced by *ne*, whereas the use of *ne non*, still rare in Early Latin (Bennett 1910: 254), is a secondary development.

Harmonic with the deontic uses of the potential subjunctive are, for instance, the noun clauses dependent on verbs of permitting (e.g., *permitto*, *concedo*, *sino*, *non patior* + *ut*). In (36) we find an example with *licet*, which in Early Latin was still felt to be a full verb:

(37) Plaut. *Asin*. 718: ***licet*** *laudem Fortunam, tamen ut ne Salutem culpem* 'it is allowable for me to praise Fortune without disparaging Salvation'

As we have seen, most of the main clause uses of the potential subjunctive are related to low epistemic certainty. Complement clauses harmonic with these uses have a consecutive value and are found after many verbs and impersonal expressions denoting existence, coming to pass, befalling, such as *accidit, euenit, contingit, fit, fieri (non) potest, sequitur, efficitur, longe* (*multum*, *tantum*) *abest*, etc., all followed by *ut* (*non*). An example: Caes. *Gall.* 4,29,1: *accidit ut esset luna plena*.

Under verbs indicating effort, conativity (*conor*, *tempto*), or wonder (*miror*), complement clauses with conditional value and introduced by *si* can occasionally be found (Caes. *Gall*. 1,8,4: *si perrumpere possent conati* 'they (the Helvetii) tried to see if they could break through'; Cic. *Lael*. 54,2: *miror ... si quemquam amicum habere potuit* 'I wonder whether he (Tarquinius) could ever have had a friend').

Complement clause uses under verbs meaning doubt and uncertainty are harmonic with the main clause epistemic uses referred to the dubitative type. They are usually introduced by *quin* and depend on negative expressions such as *non dubito, non dubium est*, or the like.

The earliest type of indirect question originated from the side-by-side arrangement of a verb of asking, knowing, etc., and a direct question. These

sentences are introduced by the same pronouns, adverbs, and particles as direct questions: enclitic *-ne* and *num* are the commonest of the introductory conjunctions; *an* occurs in Early Latin, and then again from Livy onward, but Caesar and Cicero used only the formulas *haud scio an, nescio an, dubito an*; the use of *si* is mainly a feature of colloquial Latin (in Plautus it is found after *uide*, *uiso*, etc.).

The subjunctive was obviously required when asking for instructions and advice or expressing deliberation, helplessness, and repudiation (Plaut. *Bacch.* 745: *loquere quid scribam*; Plaut. *Amph.* 1056: *quid agam nescio*), but in Early Latin the indicative was still retained in questions of fact. Sometimes both moods are found depending on the same verb, as in (38):

(38) Plaut. *Amph.* 17: *nunc cuius iussu* ***uenio*** *et quam ob rem* ***uenerim dicam***
'now I will tell you by whose command I come and for what purpose I have come'

The gradual introduction of the subjunctive into all indirect questions, a change which was completed by about 200 BCE, is probably "due to the extension from those founded on direct questions employing a subj., particularly questions with a tone of repudiation" (Handford 1947: 173), and after all "is the result of the reanalysis of the Subjunctive as a general concomitant of non-assertive complement clauses" (Bybee, Perkins, and Pagliuca 1994: 222).

9.2.1 Event integration and clause integration

Of course, the analysis presented here is far from complete, but on the whole, it confirms Givón's claim that subjunctives appear most commonly in two verbal complement types: of weak manipulation verbs and of perception-cognition-utterance verbs (Givón 1994: 278).

The syntax of Latin noun clauses, however, is rather complicated as far as the usage and the sequence of tenses are concerned. Moreover, the introductory conjunctions tend to interchange, and many verbs admit different constructions, so that the subjunctive often alternates with the indicative or with the infinitive. The distribution of moods in complement clauses, however, is not arbitrary and, since the subjunctive signals a greater degree of the *irrealis* feature, their contrast is meaning-bearing.

According to Givón, in the relationship between the main verb and the complement clause both the semantic dimension of event integration and the syntactic dimension of clause integration must be considered. The first is the extent to which the two events are integrated into a single complex event; the second is the extent to which the two clauses are integrated into a single complex clause.

The verbs used in main clauses and the corresponding syntactic constructions of the complement clauses can be rank-ordered along a continuum scale of these two iconically matched parallel dimensions (Givón 1994: 278–279). On this scale, subjunctive noun clauses are midway between infinitive noun clauses, which on the deontic side code successful causation and reflect a higher level of integration, and indicative noun clauses, which on the epistemic side code epistemic certainty and reflect a lower level of integration.

On both sides of the scale, however, the exact cut-off point, "i.e. the specific verb where the subjunctive begins to appear" is a matter of considerable cross-language variation (Givón 1994: 280). On the deontic side, the switch to an obligatory modal subjunctive complement appears invariably with lexical verbs that carry a lower manipulative force. But in this respect, the difference between English and Latin is evident with the verb 'want', which in English implies a more direct manipulation and takes an infinitive complement, whereas in Latin it may take a subjunctive complement, expressing different shades of volition.

Whenever a contrast is possible between subjunctive and an infinitive complementation of the same verb, the infinitive usually signals stronger manipulation and the subjunctive weaker manipulation (Givón 1994: 283). This is confirmed, for instance, by verbs such as *iubeo*,[34] *ueto*, *sino*, which are more frequently followed by an infinitive, but may also admit subjunctive complementation, as in (39):

34. *Iubeo* occasionally occurs with a subjunctive complement (Plaut. *Persa* 605: *iube dum ea huc accedat ad me* 'tell her to come here, close to me'), but the nonfinite construction is more frequent (*eum uenire iubet*), and the contrast with *impero* (*ei ut ueniat imperat*) seems to indicate that, in some cases, the choice of construction is mechanically determined by the superordinate verb (Palmer 2001: 192–193).

(39) a. Cic. *rep.* 3,16,2: *transalpinas gentis oleam et uitem serere non* ***sinimus***
'we do not allow the Transalpine peoples to plant the olive and the vine'

b. Verg. *ecl.* 9,43: *huc ades; insani* ***feriant*** *sine litora fluctus*
'come here, and let the mad waves lash the shores'

And if many verbs of speaking, besides actual verbs of commanding, etc., may be followed by a subjunctive clause (Ter., *Haut.* 340: *dicam ut reuortatur domum*), it is also true that when verbs of advising and persuading are used as verbs of saying, thinking, and knowing, the infinitive, or the Accusativus cum Infinitivo construction[35] must be used (Ernout & Thomas 1951: 257–258):

(40) Caes. *civ.* 3,89,5: *monuitque … uictoriam in earum cohortium uirtute constare*
'and he reminded (them) that victory depended on the valor of those cohorts'

The gradual semantic transition from weak deontic to weak epistemic modal values leads to the midscale subjunctive region, where we find verbs meaning preference/aversion, and then verbs of "epistemic anxiety" ('hope',[36] 'fear'), which code both preference/aversion toward a future event (or state) and uncertainty about it. In the transition further down, we arrive at verbs of low epistemic certainty ('doubt', 'be unsure', 'suspect', 'ask whether', 'not know whether'), and at the contrast between subjunctive and indicative complementation.[37] Eventually, arriving at verbs of higher epis-

35. As for the *Accusativus cum Infinitivo* pattern, we can hypothesize that, as in Bemba (a Bantu language), when different shades of meaning are possible for the same verb, these are reflected by an intermediate infinitive complement, with the manipulee raised to object, which "signals an intermediate degree of manipulative force, although it defies exact translation" (Givón 1994: 283). But on the primary role (from both diachronic and synchronic points of view) of participial and infinitival structures in Latin subordination, and on the function of the accusative in the *Accusativus cum Infinitivo* construction, see Kurzová (1989). On the origin of this construction see also Calboli (2002).
36. On the verbs of hoping see also n. 33.
37. This contrast involves, for instance, the complement predication of emotive predicates (*doleo*, *gaudeo*, *miror*, etc.), on which see Givón (1994: 304–307).

temic certainty, which normally require an indicative subordinate clause, the subjunctive range fades away.

It can also be observed that, from a syntactic point of view, the transition toward the epistemic side of the continuum is characterized by a gradation of finiteness in terms of the verb form employed in the complement clause: subjunctive forms are more finite than infinitives but less than indicatives, which allow a fuller range of tense-aspect distinctions (Givón 1994: 286).

Although the choice between the different constructions is not always clearly motivated by notional features, and the exact switching point is moving over time, also conditioned by the increasing confusion among the introductory conjunctions (e.g., *accidit ut* + subjunctive and *accidit quod* + indicative), this predictable distribution accounts for the vast majority of the subjunctive occurrences in complement clauses.

9.3 Subjunctive in adverbial clauses

The diachrony of Latin modal usage is to a large extent the history of the expansion of the subjunctive over a continually widening field, a process by which this mood came to be regarded as the distinguishing mark of subordination. Indeed, "Latin is remarkable among IE languages in the extent to which, by a continual process of analogical extension and attraction, the indic. in subord. clauses was gradually replaced by the subj." (Handford 1947: 139).

The increasing use of the subjunctive in adverbial sentences, even where there seems to be no notion of *irrealis*, is due to the fact that "from originally harmonic uses of subjunctives, there is a generalization to non-harmonic contexts, when the subjunctive is reanalyzed as a concomitant of subordination" (Bybee, Perkins, and Pagliuca 1994: 219).

The most important types of adverbial clauses are purpose, consecutive, conditional, and concessive clauses (see Thompson, Longacre, and Hwang 2007). In the following paragraphs we briefly discuss the way in which the use of subjunctive in such sentences relates to the other uses of subjunctives. With regard to the Latin subjunctive, however, it is difficult to trace back every use to a specific independent use, because some of these subordinate subjunctives, as we will see, are probably composite in origin.

9.3.1 Purpose clauses

Purpose (or final) clauses "are semantically modal in that they express an attitude by the subject of the sentence, explaining what intentions he has in carrying out the action indicated" (Palmer 1986: 174). In fact, intention is the most commonly mentioned deontic use that gives rise to purposive forms (Bybee, Perkins, and Pagliuca 1994: 229).

In Latin this type of sentence is introduced by *ut*[38] if the purpose is positive, by *ne* (sometimes *ut ne*) if it is negative; the use of the tenses is the same as for final noun clauses: the present or the imperfect subjunctive (the perfect is rare), according to whether the tense of the governing verb is primary or historic.

Purpose clauses are thus not formally distinguishable from complement clauses after verbs of commanding, requesting, wishing, fearing, etc.; in fact, the desiderative as well as the volitive subjunctive must have contributed to the development of the final clause (Handford 1947: 89). The sentence *ne cadam, amabo, tene me*, is a good illustration of the difficulty in distinguishing not only between coordination and subordination (cf. Section 9.2), but also between complement and purpose clauses, since it could be translated either as 'hold me from falling' or as 'hold me lest I fall'. Indeed, there is little semantic difference between these two interpretations and no obvious way in which they could be disambiguated.[39]

This reflects a widespread tendency for languages to mark purpose clauses in the same way as complement clauses of verbs meaning wanting and ordering (Bybee, Perkins, and Pagliuca 1994: 230); but the fact that in Latin final clauses are always introduced by a conjunction, whereas complement clauses may neglect the conjunction (Quint. *inst.* 6,3,88: *rogo des mihi surculum*), could signal their stronger dependence link, for only the subordinates with a strong dependency link may not exhibit a subordinating conjunction (Pinkster 1995: 159).

38. On alternative methods for expressing purpose, see Woodcock (1962: 111–112).
39. For a thorough analysis of purpose clauses in general, see Prandi (1996), who also discusses their peculiar status among circumstantial sentences.

9.3.2 Consecutive clauses

The construction used in Latin for consecutive clauses is almost identical with that used to express purpose, except that a negative clause is normally introduced by *ut non* instead of *ne*. The sequence of tenses is different, for a historic tense in the main clause need not be followed by a historic tense of the subjunctive in the subordinate clause. A past act may also have a present, or even a future, result, as in (41):

(41) Cic. *ac.* 3,7: *in eodem tanta prudentia* ***fuit*** … *ut hodie* ***stet*** *Asia Luculli institutis seruandis*
'in that same one (Lucullus) there was such wisdom that Asia stands today by preserving the ordinances of Lucullus'

The fact that a formal similarity between purpose and consecutive clauses is also attested elsewhere (e.g., in the Australian languages), indicates "that purpose and result are, in a variety of languages, closely related or even indistinguishable, concepts" (Palmer 2001: 136).

As results are essentially factual,[40] the use of the subjunctive here instead of the indicative can be seen as nonharmonic and simply interpreted as a means to mark subordination. Alternatively, one could argue that this usage, also found in noun clauses of the type *accidit ut*, is harmonic with the epistemic main clause uses of the potential subjunctive, which first indicated only a possible or hypothetical result, and then signaled a connection of cause and effect, in which the reality or unreality of the action described by the subjunctive came to be considered irrelevant (Woodcock 1962: 100).

On the whole, the use of the subjunctive in clauses containing factual statements can also be regarded as evidence that the contrast between indicative and subjunctive is not about reality and unreality, but rather about assertion and lack of assertion (Bybee, Perkins, and Pagliuca 1994: 226). And this also lends support to the idea that the subjunctive, in both main and subordinate clauses, should be viewed as the "negation of the indicative" (Müller-Wetzel 2001: 160).

40. On the connection between factuality and consecutive subordinates see Calboli (1995–1996: 148).

9.3.3 Conditional clauses

In these sentences both the subordinate (the protasis) and the main clause (the apodosis) are nonfactual. The former expresses a hypothesis or condition under which the statement of the latter holds true. In Latin, conditional clauses are usually introduced by *si* (*siue*) or *nisi* and are characterized by the distinction between real and unreal conditions, which is undoubtedly important typologically.

As in many languages, real conditions are unmarked for modality; both protasis and apodosis are usually presented in the declarative form with the indicative mood:

(42) Ter. *Andr.* 322: *si id* ***facis***, *hodie postremum me* ***uides***
'if you do this, you will see me today for the last time'

But the imperative and the subjunctive may also occur in the apodosis, because it need not contain a statement. Sometimes the condition might be stated paratactically by means of a volitive subjunctive (Plaut. *Mil.* 1037: *adeat, si quid uolt* 'if she wants anything, let her come'), sometimes by a desiderative subjunctive (Cic. *Att.* 16,13,1: *ne sim saluus, si aliter scribo aut sentio* 'may I be unsafe if I write or think otherwise').

This also suggests that the subjunctive in subordinate *si*-clauses, which in noun clauses seems also harmonic with the epistemic main clause uses of the potential type, is probably composite in origin.

Unreal conditions can be "improbable" or "ideal", if they refer to the future, and "impossible" or "counterfactual", if they refer to the present or the past. According to Classical usage, the tenses of the subjunctive required are the present or, to mark anteriority, the perfect (*si habeam* or *habuerim, dem*) and the imperfect or pluperfect respectively (*si haberem, darem* and *si habuissem, dedissem*)

These neat patterns of usage, however, reflect an idealized grammatical description of the facts, for the evidence available in the texts documents many examples of "mixed" conditionals with variations, especially in terms of tense, in the relation between protasis and apodosis (Mugler 1980).

In Early Latin, for instance, in the statement of a hypothetical condition, there is no clear distinction between what may yet happen and what is not (or no longer) capable of realization. Thus, the present subjunctive can express

impossible conditions referred to the present (Plaut. *Poen*. 1219–1220: *si sim Iuppiter, iam hercle ego illam uxorem ducam* 'if I were Jupiter, by god, I would marry her at once'),[41] alternating with the imperfect still in Classical authors (Cic. *Catil*. 1,19: *haec si tecum … patria loquatur* 'if your country were to say these things to you', and Cic. *div. in Caec*. 19,2: *Sicilia tota si una uoce loqueretur* 'if the whole of Sicily spoke with one voice'), and becoming rare in the Silver Age.

On the other hand, the original usage of the imperfect subjunctive to describe "past unreal" conditions continues up to the time of Livy, in both the protasis and the apodosis. In apodoses, moreover, the imperfect, and sometimes even the pluperfect subjunctive, frequently refers to acts or events that lie in the future from the speaker's point of view: "In other words, the tense lacks any temporal force, and has only a modal force, i.e. the expression of unreality" (Handford 1947: 122).

The pluperfect subjunctive, besides, can be replaced by the indicative after a negative condition, to express a rhetorical exaggeration, as in (43):

(43) Plaut. *Mil*. 52–53: *quingentos simul, ni hebes machaera foret, uno ictu* ***occideras***
'you would have killed five hundred men altogether in one blow, if your sabre had not been blunt'

or to vividly present as a fact what might have happened, as in (44):

(44) Cic. *epist*. 12,10,3: *praeclare uiceramus nisi … fugientem Lepidus* ***recepisset*** *Antonium*
'we would have won a brilliant victory, if Lepidus had not given asylum to the fleeing Antonius'

41. In Plautus the present was still the normal tense in present unreal conditional clauses (over 100 examples, against about 50 examples with the imperfect subjunctive), whereas in Terence the balance already inclines the other way (18 examples against 25 examples) (Thomas 1938: 202–203).

Indeed, “the emphasis laid on the correspondence of mood between protasis and apodosis results in a somewhat distorted picture of the actual facts of Latin usage” (Handford 1947: 127), and it must be admitted that the combination of subjunctive protasis with indicative apodosis, which gradually extended in post-Classical and Late Latin, was very common already in Early Latin, for instance with modal verbs and expressions such as *possum, debeo, licitum est,* etc. (ibid. 130–133), and in *si*-clauses granting a concession. This usage reflects a widespread speech habit that leads to the combination of two clauses in a complex sentence without regard to the presence of a strictly logical relation between them and in origin can also be due to an incomplete development from parataxis to hypotaxis (ibid. 127–129).

Mention must be made here of clauses of conditional comparison as well. In these sentences the choice of the tense of the subjunctive varies according to the introductory conjunctions; the general rule, though exceptions are not infrequent, prescribes the present and the perfect subjunctive after *quasi* and *tamquam* (Plaut. *Aul*. 718: *sedent quasi sint frugi* ‘they sit as though they were honest’), the imperfect and the pluperfect after *quam si, ut si, ac si*, etc., marking unreal conditions irrespective of the concordance, as in (45):

(45) Ov. *met*. 15,331: *haud aliter titubat, quam si mera uina* ***bibisset***
‘he staggers as if he had drunk unmixed wine’

This sentence type is connected with the Early Latin usage of *quasi*-clauses as wholly detached (with exclamatory or repudiating tone, Plaut. *Cas*. 333: *quasi tu nescias*), or loosely attached to a governing verb (mainly *simulo* and its compounds: Plaut. *Persa* 84: *simulabo quasi non uideam*). Such clauses obviously came to be felt as noun clauses and, partially retained by classical authors, reappeared with great frequency (still more commonly with *tamquam*) in the writings of the elder Seneca, Tacitus, and Suetonius, especially after verbs or verbal nouns of accusing, asserting, and fearing:

(46) Suet. *Tit*. 5,3: *nata suspicio est, quasi desciscere a patre …* ***temptasset***
‘it gave rise to the suspicion that he might have attempted to break away from his father’

Also related to conditional clauses is a sentence type usually appended to a main clause containing a request or a permission and introduced by *dum*,

modo, *dummodo* 'provided that', negation *ne*. The conjunction *dum* probably developed this meaning from its use with the imperative (e.g., *agedum*) in the sense 'now', and the following subjunctive can thus be interpreted as harmonic with the volitive type, which develops subordinate uses like *me quoque etiam uende, si lubet, dum saturum uendas* (Plaut. *Persa* 145–146) from paratactic sequences like *uendedum*: *saturum uendas* 'sell me now; only sell me full'.

9.3.4 Concessive clauses

A concessive or adversative relation involves a main clause, which is normally asserted, and a subordinate one which says that, in spite of the negative implication, the main clause assertion stands.

In Early Latin the only example of an independent subjunctive with a concessive sense seems to be the often-quoted sentence *sint sane superbi: quid id ad nos attinet?* (Cato *orig.* 5,7), and this usage, which is not found until Classical Latin, is accounted for as a development either from the volitive subjunctive (Kroll 1916: 122, Ernout & Thomas 1951: 199), or from the desiderative (optative) subjunctive (Hofmann & Szantyr 1965: 332, Ronconi 1968: 139, Calboli 1966–1968: 275). Considering the development of English *may*, a possible link between concessive and optative functions is also discussed in Bybee, Perkins, and Pagliuca (1994: 226).

In classical prose this adverbial clause type is fully developed and the mood follows the same rules as for conditional sentences. If the 'in spite of the main action' reading holds, the sentence has the indicative mood (conjunctions *quamquam* and *etsi*), whereas the subjunctive is normally required if the concession is a suppositional one. In this case the sentence is introduced by *quamuis*, *licet*, *etiamsi*, *sane*, the negation is *ne*, and the tense normally required is the present, as in (47):

(47) Cic. *Tusc.* 2,5,14: *ne* ***sit*** *sane summum malum dolor, malum certe est*
'pain may not be the greatest evil, but an evil it certainly is'

Since, as in other languages, the same marker occurs in both concessive clauses and in the protasis of reality conditions, the latter can be viewed as another possible source for subjunctives in concessive clauses. In particular,

concessive conditional sentences can by inference evolve into concessive sentences, when the meaning ‘even if’ is taken to mean ‘even though’ (Bybee, Perkins, and Pagliuca 1994: 227–228).

9.3.5 Other types (temporal and causal clauses)

The varying functions of the subjunctive and its contrast with the indicative in adverbial clauses are interestingly exemplified in temporal and causal clauses as well.

In some circumstances, temporal sentences can be marked as modal, for instance referring to hypothetical future events, or in present generalizing sentences (Sall. *Iug*. 31,28: *bonus tantummodo segnior fit, ubi neglegas* ‘a keen man becomes more apathetic when you neglect him’). The subjunctive is also used to add the sense of purpose (Liv. 32,9,8: *paucos moratus dies, dum se copiae ab Corcyra adsequerentur* ‘he delayed a few days, until the forces from Corcyra caught up with him’).

In post-classical authors, however, this nuance seems to become worn out, for the subjunctive is increasingly used in contexts where the idea of intention is most unlikely (Tac. *ann*. 2,6: *seruatque nomen … donec Oceano misceatur* ‘and (the Rhine) preserves its name until it mixes with the North Sea’).

Examples of subordinate clauses where the subjunctive has weakened meaning are already commonly found in Early Latin; in clauses dependent on *priusquam* or *antequam*, an unmotivated use of this mood can be due to attraction, which takes place, for instance, after an expression of desire or intention (Plaut. *Amph*. 533: *exire ex urbe prius quam lucescat uolo* ‘I wish to depart from the city before dawn’). This use continues throughout the classical period, where the subjunctive came also to be used more and more with some kind of conjunction, mechanically occurring in contexts where the modal force was weak or absent, only to mark subordination, or simply to distinguish between different kinds of subordinate clauses.

The indicative and the subjunctive mood, in fact, distinguish true temporal from causal or concessive *cum*-clauses respectively (e.g., Nep. *Hann.* 10,4: *dolo erat pugnandum, cum par non esset armis* ‘it was necessary to fight by guile, since he was not a match in arms’; and Nep. *Phoc.* 1,2: *fuit*

enim perpetuo pauper, cum diuitissimus esse posset 'he was always poor, when (although) he might have been very rich').

As for causal clauses, however, when the true cause is given, the indicative is normally required, and the subjunctive is found only with reported reasons (Cic. *Tusc*. 4,44: *noctu ambulabat … Themistocles, quod somnum capere non posset* 'Themistocles used to walk about at night because he allegedly could not get to sleep'), or rejected reasons (Cic. *Tusc*. 2,56: *pugiles … ingemescunt, non quod doleant* 'boxers heave groans not because they are in pain'). Both uses are in fact associated with the domain of *irrealis*, and the subjunctive for reported reasons is particularly connected with the uses within indirect speech, which clearly relates to the operator Evidentials (Section 2.3).

9.4 Evidentials

Although all languages have means of qualifying utterances by introducing references to the origin of information, not all languages have an evidential grammatical category. Latin, for example, has no morphological evidential in its verb system, and evidential meanings are rendered by means of such expressions as *uidetur*, *ut mihi uidetur*, *traditur*, *dicitur*, etc., which are part of the lexicon, for evidentiality has not been grammaticalized here.

In fact, "to be considered as an evidential, a morpheme has to have 'source of information' as its core meaning; that is the unmarked, or default interpretation" (Aikhenvald 2004: 3). In many languages, however, "Evidential meanings are not conveyed by specific forms, but occasionally expressed by forms whose central meaning is something else" (Lazard 2001: 360). The Latin subjunctive, for instance, may have this function within indirect speech, where "the speaker is somehow split into two persons, the one speaking and the one who has heard, inferred, or perceived" (ibid. 362), and the mood is used to create a distance between the speaker and the speaker's own discourse.

The three basic types of indirect speech – indirect statements, indirect questions and indirect commands – reflect the three sentence types discussed in Section 2.4. Latin rarely uses the subjunctive for reported statements (see

the example of reported cause mentioned above), but this mood is normally required for indirect questions (Rosén 1999: 110–111) and commands.[42]

9.4.1 Subjunctive in oratio obliqua

Indirect speech (*oratio obliqua*) differs from direct speech (*oratio recta*), partly in the use of moods and tenses, partly in the use of the pronouns. *Oratio obliqua* depends on some verbs of saying or thinking, expressed or implied, the principal clauses (except interrogatives and directive sentences) being put in the infinitive, the subordinate clauses in the subjunctive.

According to Handford, the use of the subjunctive here probably had its starting point in the attraction of mood, which is per se "a good instance of the remarkable tendency of Latin to extend the use of the subj. to its furthest limits" (1947: 148). In Early Latin, out of 100 examples of subjunctive in subordinate clause of indirect speech, 40 refer to the future (Bennett 1910: 315–316), and it is probably from such a beginning that the usage extended to all subordinate clauses in *oratio obliqua*.

The tenses ordinarily follow the laws of sequence, and their choice is regulated by the point of view of the reporter, or the point of view of the speaker, but not infrequently it shifts from reporter to speaker, sometimes in the same sentence, as in (42):

(48) Sall. *Catil.* 34,1: *ad haec Q. Marcius respondit, si quid ab senatu petere **uellent**, ab armis **discedant***
'to that Marcius replied: If they wished to ask anything of the senate, they must lay down their arms'

By assuming the speaker's point of view, the authors impart greater liveliness and accuracy to the discourse and often prevent ambiguity in conditional sentences. The historians developed this form, which is technically called *repraesentatio*, into a regular practice, to reproduce the tenses of the *oratio recta* as accurately as possible in *oratio obliqua* (Handford 1947: 156).

42. On Evidentials in questions and commands, see Aikhenvald (2004: 242–253).

Criticizing the view that the oblique subjunctive is only a morpheme of completive subordination, or a mere mark of syntactic dependence, Moralejo (1996) underlines the semantic content of this mood in the "virtual *oratio obliqua*", which lacks any governing verb, and in repudiating questions, which he sees as examples of nonsubordinate oblique subjunctives in a sort of indirect quotation. Given this full semantic function of "discursiveness", he thus considers the oblique subjunctive as the "metalinguistic" mood of Latin (ibid. 29).

9.5 The evolution of the subjunctive in subordinate clauses

The discussion so far has concentrated on the increasing use of the subjunctive in subordinate clauses, and on its expansion from originally harmonic contexts to nonharmonic contexts. In complement clauses where they are semantically appropriate, subjunctive meanings "can be viewed as a weaker reflection of the lexical meaning of the main predicate" (Bybee, Perkins, and Pagliuca 1994: 214); but as such uses become more common, the semantic contribution of the subjunctive mood becomes less important, and it is interpreted as an obligatory concomitant of subordination of a certain type. From this point, the subjunctive spreads to other subordinate clause types, where it is less semantically appropriate and makes little or no semantic contribution.

Thus, "al menos para alguno de los casos el subjuntivo se hizo un procedimiento formal para marcar como tal oraciones subordinadas; en otras palabras, era un procedimiento morfo-sintáctico más que morfo-semántico" (Pinkster 1995: 274). After the generalization of subordinating uses, however, the only further development for subordinate modals is their gradual loss from the language (Bybee, Perkins, and Pagliuca 1994: 214).

This cross-linguistic tendency is partially confirmed in the evolution from Latin to Romance, when the subjunctive in subordinate clauses begins to be challenged by the indicative. As pointed out by Molinelli (1998: 557–559), on the one hand Väänänen's data (1987) testify to the unquestionable vitality of the subjunctive in the *Itinerarium Egeriae*, but on the other hand, the investigation of different text types confirms the increasing fluctuation in the use of the indicative and subjunctive moods.

Analyzing the versions of the biblical texts, Vineis explains the indicative in indirect interrogatives, especially in the *Itala*, as a direct influence of Greek (Vineis 1974: 206), but he also mentions the overall confusion between indicative and subjunctive in interrogative and relative clauses. Similar phenomena are recorded also in Arnobius and in Gregory of Tours, and the opposition between the two moods appears completely neutralized in Merovingian bureaucratic texts (Molinelli 1998: 559).

The fluctuation seems to characterize in greater degree causal and temporal subordinates, whereas the subjunctive tends to be maintained in contexts of direct dependency, where the subordination links with the main clause and the influence resulting from the modal values of the independent uses are stronger (Molinelli 1998: 560–561).

On the whole, the vitality of the subjunctive is thus greater in complement clauses than in adverbial subordinates, where a purpose or a consecutive sentence can be expected to retain the subjunctive more frequently than, for instance, a temporal clause. Therefore, we could hypothesize that a reverse path, starting from nonharmonic contexts with a weaker hypotactic link, gradually leads to the partial loss of the subjunctive; the overall situation, however, is complicated by various factors and specific changes,[43] which need to be further clarified.

10. Interaction with other operators

10.1 Tense and aspect

As mentioned in Section 1.1, modality is related to other categories in several ways. As pointed out by Lyons (1977, 2: 809–823), logicians treat tense logic as a branch of modal logic, and it is beyond doubt that in Latin, as in many other languages, there are some close connections between modality and both future (cf. Section 8.1) and past tense (on its interaction with the modal verbs

43. For instance, some phonetic changes that, causing homophony between the forms, affected the *consecutio temporum* (Ernout & Thomas 1951: 353), or the role of introductory conjunctions in complement clauses, where the spread of the type with *quod* increased the use of the indicative (Ernout & Thomas 1951: 253–254, Cuzzolin 1994).

cf. Section 5.4.1). If the former may be thought to be the most "modal", yet it is the past tense that has the most puzzling relation with modality and the category of *irrealis*.[44]

The participation of past or perfect morphology in the marking of subjunctive clauses is puzzling because the subjunctive has a strong association with *irrealis*, whereas past and perfect "are quintessential *realis* tense-aspects" (Givón 1994: 310).

Although the synchronic explanations seem to be largely circular, it is nonetheless possible to speculate why some uses have come about historically. For example, the use of past or perfect forms in counterfactual conditionals, so widespread in many unrelated languages and language families, can be viewed as a "modal blend" of *realis* and *irrealis*, for they "involve a past event (*realis*), one that didn't occur (NEG-real), but still placed under the scope of hypothesis (*irrealis*)" (Givón 1994: 320).

In Latin as well, the morphology of such modal hybrids reflects these mixed properties, showing both *realis* (perfect tenses) and *irrealis* markers (subjunctive, conjunction meaning 'if').

The diachronic data also suggest a cross-linguistic pathway of grammaticalization that, from this point of penetration where the association of past tense and modality finds a natural explanation, leads the *realis* grammatical forms to "colonize" the *irrealis* range. Their spread to the subjunctive of low certainty in the other unreal conditionals is a small step, preceding the further extension to the subjunctive of uncertainty in many subordinate clauses.

It must also be observed that in some cases the perfect may add to the modal context not only the temporal notions of anterior (Cic. *Lig*. 18: *fuerint cupidi, fuerint irati*) and past actions (Cic. *fin*. 2,41: *hoc dixerit potius Ennius*), but also aspectual values.

As Chung and Timberlake put it (1985: 256), "Non-actual modality, and the deontic mode in particular, appears to induce perfective aspect more than does actual modality". From this point of view, the difference between the tenses of the subjunctive in prohibitions is considered an aspectual one since

44. On the hypothesis of the subjunctive as a "deictic" category, see the thorough analysis in Müller-Wetzel (2001). For a discussion of the uses of the Greek optative that parallel the Latin subjunctive, and on its interpretation as a "modal-past subjunctive", see Palmer (2001: 204–207).

Delbrück's observations that the present has a "durative" value and the perfect or *s*-subjunctive a "momentary" value (Delbrück 1893–1900, 2: 376–383). Although partially criticized by some later scholars (Thomas 1938: 116–118), this theory is widely accepted, even despite the exceptions (Bennett 1910: 174), which "merely show that differences of aspect were ceasing to be clearly felt in Latin, and the constructions were coming to be regarded to some extent as mere alternatives" (Handford 1947: 45).

The interrelation of tense/aspect and modality can also be illustrated by some uses of the imperfect indicative, where a sort of "virtual perspective" is added to incomplete actions (Mellet 1990). These are the imperfect *de conatu* (Plaut. *Asin*. 931: *ego dissuadebam, matrem* 'I was trying to dissuade him, mother'), and the imperfect used with a particular illocutionary force in polite requests, as in French and Italian (Plaut. *Asin*. 392: *quid quaeritas?* **::** *Demaenetum uolebam* 'what are you looking for? **::** I wanted Demaenetus').

As for the connection between future and modality, it has frequently been observed that the future tense "is also used in a wider or narrower range of non-factive utterances, involving supposition, inference, wish, intention and desire" (Lyons 1977, 2: 816). This is true of Latin as well, where the future of the indicative is used in ways that were in principle proper to the subjunctive, expressing exhortation, wish, deliberation, etc. (Smith 1996, Ronconi 1968: 116–118), and showing also epistemic values (Núñez 1991: 187–192), as in (49):

(49) Plaut. *Persa* 645: *haec erit bono genere nata, nihil* ***scit*** *nisi uerum loqui*
'she must come of a good family, she knows nothing but to tell the truth'

On the other hand, future time can be signaled by subjunctive mood, for instance, in temporal clauses referring to hypothetical future events, and in the apodosis of real conditional clauses that refer to the future, as in Classical Greek.

Moreover, since both future and subjunctive share a prospective meaning, it is not surprising that their relationship can also be shown historically in many languages, where future tenses are derived from subjunctives forms, as

in Latin[45] (Handford 1947: 83–84, Calboli 1966–1968: 260–267). According to Smith (1996: 304), in Plautus's Latin the future is still a mood that continually tries to become a tense. Since tense is a more peripheral operator than mood, such a development can thus be viewed as an example of the diachronic trend of inner to outer (Foley and Van Valin 1984: 217).

10.2 Negation

As for the relationship between modality and negation in Latin, there has been much discussion among scholars on the use of the negative particles *ne* and *non.*

According to Palmer (2001: 129), since Latin *ne* and Greek μή are typically associated with the subjunctive (and the optative), whereas *non* and οὐ are frequently found with the indicative, "it is tempting … to treat these negative forms as *irrealis* and *realis* respectively". But Palmer's proposal is obviously untenable, because his "general rule" conflicts with the complex functioning of these negations, and in particular with the remarkable exception of the *non* and οὐ uses with the subjunctive (and the optative).

As for Latin, traditional grammars often attempt to recognize different subjunctive types on the basis of the different kind of accompanying negation. In this respect, a widely accepted view is that for the subjunctive functions related to both the notions of will and wish the negation is *ne*, whereas for the subjunctive functions related to the notion of possibility the negation, as with indicative statements, is *non* (Woodcock 1962: 84–85, Ernout & Thomas 1951: 195).

Given this distribution, however, it is not surprising that various explanations have been offered seeking some consistent correlations with the original subjunctive and optative uses. Moreover, the situation is further complicated by some mixed uses such as *non* in wishes (Plaut. *Cist.* 555: *utinam audire non queas* 'I only wish you could not hear'), and by some diachronic changes such as the spreading of *non* to prohibitions as well in post-Classical Latin

45. Other paths of development for future markers in Latin (in particular obligation-derived futures) are discussed in Bybee, Perkins, and Pagliuca (1994: 261–262), and in Pinkster (1985).

(Ov. *ars* 3,133: *non sint sine lege capilli*). It is nonetheless possible to speculate, very tentatively, along the following lines, how the overall distribution of negation particles has come about.

As mentioned in Section 8.2, the different subjunctive types can be conceived of as covering different points along the two scalar subdimensions of *irrealis*. We also observed that sometimes the subjunctive contrasts with the imperative on the deontic side, and with the indicative on the epistemic side.

There is then no great puzzle in the fact that Latin uses the negation of the imperative *ne* with the subjunctive types that, from the notion of intention, developed deontic uses closer to necessity. The negation *non*, on the other hand, extended from the indicative to the subjunctive uses related to possibility, distinguishing thus the subjunctive of low epistemic certainty from the subjunctive of weak manipulation.

A further point about negation and modality is that the verb *nolo*, like Welsh *peidio* 'cease', is peculiar in that it "might be thought to be a negative modal verb" (Palmer 2001: 106).

11. Conclusions

11.1 Summary

As we have seen, modality deals with an extremely wide range of concepts, forms, and functions, identifying a complex domain where different ideas and methodologies cross paths.

This study has intertwined the functional-typological approach with the diachronic perspective. First, it has focused on grammatical markers characterized by richness of meanings and multiple uses, on the assumption that a functionally oriented description of modality can provide significant generalizations about the different uses of forms, which, on the other hand, need to be identified cross-linguistically before their functional variability can be studied.

Second, the claim we have been developing in this chapter is that the various meanings and functions traditionally ascribed to the modal verbs or associated with the mood labels are better described in terms of diachronic sequences than synchronic realities. This approach is based on the hypothesis

that semantic development is predictable, and that multiple uses of forms are not randomly distributed but are associated and located along certain pathways that reflect the evolution of grammatical meanings. The foregoing implies that only the diachronic perspective can reveal how the various functions are related and how a modal form compares to similar forms in other languages.

For our purposes it appeared necessary to clarify some basic notions, such as the divide between propositional modality and event modality, which include, respectively, two fundamental subtypes: epistemic and deontic. We then sketched a functional description of modality by distinguishing the four operators that work over different clausal layers, and by illustrating their correlations with the different modality types and subtypes. Moreover, all the different devices by which languages deal with the overall category of modality have been divided into two basic categories: mood on the one hand, and the modal system on the other.

Having established these basic points, we set out the criteria underlying the further distinction between semimodal markers and modal markers: while the former can express either event modality or propositional modality, or merely distinctions of illocutionary force, the latter can manifest the category of modality in various shades and at many levels, covering a wide functional and semantic range that reflects their complex relationships with different operators.

Considering that polysemy and polyfunctionality are relevant not only to the synchronic description of modality, but also to its diachronic study, our investigation has thus concentrated on Latin modal markers and on their evolution from event modality to propositional modality.

The analysis of modal verbs and expressions has shown that they develop specific deontic and epistemic meanings, starting from a restricted set of premodal sources and propelled by certain common mechanisms of change. Furthermore, it was argued that, with respect to making a comparison between the various modal forms, a third notion is relevant besides necessity and possibility: the notion of intention. The different diachronic paths within the Latin modal system were discussed separately and summarized in the accompanying semantic map.

As for the moods, we discussed some recent contributions concerning their meanings and functions, and special attention was paid to their correla-

tions with the *realis/irrealis* dimension. It was also suggested that the three notions of intention, possibility, and necessity are also pertinent to the analysis of the Latin subjunctive, and that intention, encompassing the concepts of 'wish' and 'will', as well as the idea of "future-projection", could be considered the protypical and archetypal core that motivates all the various subjunctive types mentioned in traditional grammars. Subsequently, our attention was directed toward explaining how subjunctive forms originally signaling event modality gradually came to express propositional modality in main clauses, thus covering the wide range of *irrealis* regions between weak intended manipulation and low epistemic certainty. The subjunctive uses in subordinate clauses were illustrated and interpreted by making reference to the concepts of modal harmony, event integration and clause integration.

Eventually, the complex role of *irrealis* was also discussed with regard to some puzzling questions concerning the interaction between modality and other categories, such as tense, aspect, and negation.

11.2 Diachronic mechanisms

In this study, special attention was paid to the causes underlying the developments of modal markers, and to the ways linguists have gone about explaining the observed changes.

It has been observed that the temporal priority of deontic vis-à-vis epistemic reflects the diachronic trend whereby more-inner operators tend to be reanalyzed as operators over outer layers. Indeed, the shift of the modal markers from Modality to Status, and from event to propositional modality, entails a complex network of developments, whose details can be illuminated by the diachronic patterns provided by grammaticalization theory.

Grammaticalization chains involve different mechanisms of change that we have found evidence for in this investigation: the most relevant are generalization and harmony.

The processes concerning the Latin modal system have given evidence of the mechanism of generalization or bleaching, which is the loss of specific features of meaning with the consequent expansion of the contexts of use for a given form. The verb *possum*, for instance, illustrates the evolution of forms signaling physical capability being extended to cover ability, and then

becoming general markers of possibility. On the whole, the process of semantic generalization is related not only to the state of affairs–type described by the complement predication, but also to its temporal reference and aspectual properties, and to the role and the characteristics of the participant as well.

Generalization is itself a mechanism of change that can also include the outcome of a change caused by some other mechanism, such as repetition, which takes place when forms with more general and abstract meanings become more widely applicable and frequently used in fixed contexts. An elegant example of repetition can be found in the development of *licet*, which gradually increases its occurrence in fixed contexts with the verbs *scire* ‘know’ and *uidere* ‘see’, thus grammaticalizing into the pair of synonymous adverbs *scilicet* and *uidelicet* ‘of course, evidently’ (Heine & Kuteva 2007: 74, but see also Hahn 1948 and Magni forthcoming c). The connection between semantic and formal change is also observable in the erosion of the form *potis*, which announces the univerbation of the phrase *potis sum* in the verb *possum*.

The mechanism of harmony, on the other hand, was mentioned to explain the subjunctive uses in subordinate clauses. It was argued that subjunctive forms are first used in complement clauses where their modal meaning harmonizes with the modal meaning of the main clause. In such cases, this modal marker does not contribute additional meaning to the sentence. From these uses, the subjunctive can be generalized to other subordinate clauses, even those in which it is not modally harmonic, especially after its reanalysis as a concomitant of subordination. As a mechanism of change, then, harmony applies only to the later stages of evolutionary paths, when the modal marker had already lost most of its semantic content.

Doubtless many other questions and interpretations could be derived from this large and occasionaly contradictory area. Illustrative examples in this chapter focus mainly on Early and Classical Latin, where most of the relevant changes, in particular those concerning the modal system, are already attested. With regard to the moods, however, mechanisms of change are most profitably studied by a close analysis of texts which show a change in progress, and where the distribution and relative frequency of different uses of the same form may reveal the very nature of the steps from one meaning to another.

11.3 Conclusion

Of necessity, this work has not been able to provide detail on all matters that make up the domain of modality in Latin. So wide is this domain, indeed, that there are several important issues which we have had to pass over, in particular a systematic comparison with modality in Ancient Greek, and a thorough discussion of the diachrony of individual modal markers over all authors; but limitations of space have prevented this.

Nonetheless, the examples listed herein have provided a good overall view of the various functions that the formal means employed in this realm can carry out. Moreover, enough has been said to demonstrate how typological data and diachrony can enrich our insight into the category and shed a different light on some traditional issues.

One of the conclusions to be drawn from the phenomena illustrated in this chapter is that some of the intuitions of traditional grammars should be modified by taking into account both the concepts of deontic and epistemic, as well as the *realis/irrealis* dimension. Furthermore, not only necessity and possibility, but also the notion of intention, which has been neglected in existing descriptions, should be recognized as pertinent to the analysis of the Latin modal markers.

The basic concepts and distinctions adopted here have provided useful semantic criteria for the delimitation of modality and for the identification of modal markers, whose properties of polysemy and polyfunctionality have been used to study the dynamic coevolution of meaning and form described by some universal paths of development. The result is not a unified pattern where everything falls into place, but, undoubtedly, an extremely rich overview with new and promising areas of investigation.

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Actionality, tense, and viewpoint

1. Introduction

1.1 A few words on the basic concepts

Aspect as a concept has for over a century been a matter of dispute among linguists. Many have claimed that the concept of *Aktionsart*, here called *Actionality*, must be distinguished from Aspect, which I prefer to refer to here as *Viewpoint*.[1]

Actionality refers to various kinds of situations (stative, dynamic and atelic, telic and durative, telic and momentaneous, and semelfactive) described by verbs and verb phrases.[2] In Early and Classical Latin, a number of verbal affixes are used to indicate agency and various kinds of actionality and to put the focus on different parts of an action: that is, its beginning, middle, or end. There are also constructions with phasal verbs, such as 'begin' or 'start', 'stop' and 'continue', or certain adverbs, such as 'immediately' or 'suddenly', which shift the actional value of a verb constellation.[3]

Viewpoint indicates the manner in which an action is regarded and refers to the fact that you could choose to give a summarized view of an action or present it from within as something that is going on. The perfective viewpoint presents us with a summarized overview of an action, whereas the imperfec-

1. For a brief history of the term *Aktionsart* see, e.g., Szemerényi (1987: 2–9); on this discussion see, e.g., Knobloch (1986, 1: 76–78, 172–181) and Dahl (1994).
2. See, e.g., Vendler (1957; 1967: 97–121), Comrie (1978: 41–51), Lyons (1977, 2: 705–715), Dik (1981: 32–43), Smith (1997: 17–37, 39–59), Johanson (1971; 2000: 55–76), Klein (1994: 30–35, 72–98), C. Lehmann (1996), and Bertinetto and Delfitto (2000); for the history of this theory see Dowty (1979: 52–55); also Dahl (1981: 80); Verkuyl (1972) criticized this tradition. For discussion of Latin see, e.g., Vester (1983: 9–36), Pinkster (1995: 22–24), Haverling (2000: 22–31), and Oldsjö (2001: 131–146).
3. See, e.g., Smith (1997: 25, 48–50) and Johanson (2000: 56–57).

tive viewpoint presents it from within, as going on. In many languages the opposition between perfective and imperfective viewpoint primarily affects the past tenses, in the sense that this is the opposition expressed by morphological differences.[4]

The concepts of actionality and viewpoint are related in the sense that there is some resemblance between the notions of perfectivity and telicity on the one hand and imperfectivity and atelicity on the other: for instance, completive adverbials of time involve perfective and telic expressions and not imperfective and atelic ones.[5] Latin, however, is a language where it is of particular importance to keep the two concepts apart.

Tense is a deictic notion and a grammaticalized expression of location in time, where the basic point of orientation is the moment of speech. It is conceptually analogous to space and indicates the temporal location of an action. It consists of the notions of absolute time (past, present, and future), absolute-relative time (before-past and before-future), and relative time (anterior, simultaneous, and posterior).[6] Not all languages have tense forms: for instance in Mandarin Chinese there are no such forms of the verb and temporal location is not obligatory, though the idea of tense may be conveyed with the help of adverbials and modal auxiliaries.[7] The degree to which languages indicate the various kinds of location in time differs greatly. Often, for instance, the simple future is indicated by a present tense (*'Tomorrow I write him a letter'* = *'Tomorrow I shall write him a letter'*).

The opposition between perfective past and *present perfect* is of no relevance in some languages (e.g., Russian), but it is of considerable relevance

4. See, e.g., Lyons (1977, 2: 703–705, 708–710), Comrie (1978: 16–40), Smith (1997: 61–95, 126–128), Klein (1994: 27–30, 99–119), and Johanson (2000: 76–102); cf. Haverling (2000: 16–19). For discussion of viewpoint in Latin, see, e.g., Hofmann & Szantyr (1965 §§ 167, 168, 178), Chausserie-Laprée (1969: 383–393), Mellet (1988: 97–117), and Pinkster (1995: 279–283, 287–290, 307–310); on Greek see, e.g., Kühner & Gerth (1898 § 382.7b), Schwyzer (1959, 2: 275–286), Smyth (1956 § 1890), and Rijksbaron (1994: 11–14); and on Russian, e.g., Forsyth (1970: 59–118, 132, 154–164), and Smith and Rappaport (1997: 232).
5. See Bhat (1999: 58–59); cf. Lyons (1977, 2: 705–710).
6. See, e.g., Lyons (1977, 2: 677–690), Comrie (1985: 2–18, 122–130), Klein (1994: 18–26, 120–141), and Smith (1997: 97–121); cf. Haverling (2000: 19–22).
7. See, e.g., Comrie (1978: 2; 1985: 50–53) and Smith (1997: 98–99, 263).

in others (e.g., Classical Greek, Swedish, and English).[8] The perfect differs from the perfective viewpoint in presenting the performance of a past action as currently relevant ('she has written the book') or resultative ('he is dead'), whereas the perfective viewpoint just gives a summarized overview of it ('she wrote the book', 'he died'). There has been some discussion of whether the perfect should be regarded as a viewpoint or not.[9] In this chapter I treat it in the section on tense (Section 3).

Few problems in Latin syntax and morphology have created more debate than the verbal system and the relevance of such concepts as tense and aspect to the description of that system. The discussion of these matters during the last century and a half reflects the development of the concepts in modern linguistics. The common handbooks and school grammars, most of which are rather old by now, therefore often provide us with contradictory and sometimes even misleading descriptions of these matters.[10]

1.2 A few words on the Proto-Indo-European background

The character of the verbal system in the earliest phases of Proto-Indo-European is a matter of some controversy – to a considerable extent due to the different ways in which scholars interpret the evidence provided by Hittite, the oldest documented Indo-European language, which has a rather simple system with no clear traces of the aspectual system met with in Sanskrit and Greek. For this reason, several scholars assume that the verbal system in its earlier phase had a relatively simple structure which differed considerably

8. See Comrie (1978: 52–53, 60–64) and Johanson (2000: 38, 120, 129). Harris (1982: 45) observes that there are also differences between various forms of English in this respect (American English tends to use the past tense in a few cases where British English prefers the perfect). On the loss of the past tense and its replacement by a former perfect tense form in some European languages, see Abraham and Conradie (2001).
9. For this reason some scholars, perhaps influenced by the Greek system, have recognized three aspects, imperfective, perfective, and perfect: so, e.g., Hofmann & Szantyr (1965 § 167); see Szemerényi (1987; 1996: 305–309).
10. An extensive bibliography was collected by Rönkä (1997); for overviews of the past discussion see, e.g., Pinkster (1983), Mellet (1988: e.g. 77–81), Haverling (2000: 3–15), and Oldsjö (2001: 17, 55–64).

from the system later found in Sanskrit and Greek; the verb in this system may have expressed action (the active voice), process (the middle voice), or state (the perfect); and the agency opposition may have been between the "active" and the "nonactive".[11]

In later Proto-Indo-European, however, the complexity had increased and the traditional reconstruction posits two voices ("active" and "middle"), five moods ("indicative", "subjunctive", "optative", "imperative", and "injunctive"),[12] and three aspectual stems ("present", "aorist", and "perfect"), from which tenses expressing present and past actions were formed. The endings of the Proto-Indo-European verb also indicated person and number; they were "thematic" or "athematic" and they were divided into the categories "primary" (for the present indicative) and "secondary" (for, e.g., the indicative of the past tense and the optative); and in at least two dialects, Greek and Indo-Aryan, there was a morpheme *h_1e-*, called the "augment", which was added before the root and indicated past tense. Proto-Indo-European at this stage also distinguished between transitivity and intransitivity and had a number of suffixes with which new verbs were formed that expressed, for instance, causativity and various kinds of dynamicity. The semantic quality of a verb could be changed by particles, which in the later stages of development often turned into prefixes.[13]

The individual languages exhibit several differences when compared to the system traditionally assumed for classical Proto-Indo-European and met with in Greek and Indo-Aryan. Many of them have added elements, especially a voice (the passive) and a tense (the future), but there are also many losses, particularly in the categories of number (the dual is lost in several languages), mood (loss of the injunctive and/or optative), aspect (loss of the aorist or

11. See Watkins (1998: 56–62); cf., e.g., Beekes (1995: 225–227, 252–254), Szemerényi (1996: 230–232, 245–247), Luraghi (1998: 182–186), and Baldi (2002: 71–76, 361–370). W. P. Lehmann (2002) discusses the evidence that indicates that Indo-European at this very early stage (referred to as "Pre-Indo-European") was an active language, which later developed the nominative/accusative system met with in the attested languages.
12. According to Meiser (1998 § 33.3), the injunctive is not a mood but expresses tenselessness.
13. See Beekes (1995: 225–254), Szemerényi (1996: 245), and Watkins (1998: 56–62); cf. Comrie (1998: 84–88); see also Sihler (1995 §§ 410–417) and Baldi (2002: 71–76, 361–370).

perfect) and voice (loss of the middle). For that reason some scholars object to the projection of all the morphological complexity of Sanskrit and Greek into Proto-Indo-European and observe that there are no clear signs of this outside the eastern group of Indo-European.[14]

Ancient Greek has most of the features traditionally ascribed to classical Proto-Indo-European and has added relatively few items, notably the passive voice, infinitives, and tenses expressing future actions. In the Classical period it has three voices, four moods, and three aspectual stems, as indicated in Table 1. Greek has retained the old athematic category (represented by the μι-verbs) as well as the division into "primary" (for the present indicative) and "secondary" endings (for, e.g., the indicative of the past tense and the optative) and uses the "augment" (the morpheme ἐ-) in the formation of the indicative of the imperfect and aorist tenses.[15]

Latin seems to have lost two important categories still found in Greek: one mood (the optative) and one tense (the aorist). That it is a matter of losses is implied by the fact that traces of them are left in Latin. In the Classical period Latin has two voices, three moods, and two aspectual stems, as indicated in Table 1. There are traces of the opposition between athematic and thematic endings in Archaic Latin, but not in Classical Latin. Latin does not have some of the morphological elements found in classical Proto-Indo-European and introduces some morphological innovations to express some old and some new categories. There are six tense forms in the indicative, of which only two, the present and the perfect, are structural descendants of Proto-Indo-European. The subjunctive lacks a future in both the *infectum* and the *perfectum* (Table 1).[16]

In the Latin perfect, the old aorist forms survive together with perfect forms in the conjugation of the verbs, and in one case they are found in the same verb: *parco* 'be merciful, spare' has retained the old aorist (*parsi*) as

14. So, e.g., Drinka (1995: 4–7); on this problem see, e.g., Kurzová (1993: 107–192), di Giovine (1997a, 1997b, 1998, 1999), W. P. Lehmann (2002), and Jasanoff (2003); cf. Sihler (1995 §§ 407–550).
15. See, e.g., Schwyzer (1959, 1: 639–646) and Hoenigswald (1998: 248–256); cf. Palmer (1980: 292–307).
16. See, e.g., Leumann (1977 §§ 390–392) and Vineis (1998: 300–312, 317–318); cf. Palmer (1961: 261–281); on Italic Languages cf., e.g., Silvestri (1998: 336–338).

Table 1. Categories of the verb in Classical Greek and Latin

	Classical Greek		Classical Latin	
Voice	3:	active, middle, passive	2:	active, (medio)passive
Mood	4:	indicative, subjunctive, optative, imperative	3:	indicative, subjunctive, imperative
Aspect	3:	present, aorist, perfect	2:	infectum, perfectum
Tense	5:	present, past, future; before past, before future	5:	present, past, future; before past, before future
Agency	2:	transitive, intransitive	2:	transitive, intransitive
Number	3:	singular, dual, plural	2:	singular, plural
Personal endings	2:	primary, secondary	2:	primary, secondary
Tense forms in the indicative	7:	present, imperfect, simple future; aorist; perfect, pluperfect, future perfect	6:	present, imperfect, simple future; perfect, pluperfect, future perfect

well as the more common perfect (*peperci*).[17] In Early and Classical Latin there are traces of both elements, and there is a growing number of new forms with *-ui* expressing the new combined perfect and past tense.[18] This reconstruction has, however, been subject to some debate, but most scholars still maintain that the Latin perfect was probably created through the merger of the Proto-Indo-European perfect and aorist.[19] In that case it is likely that the functions of the aorist and perfect stems merged gradually. The change had an impact on several aspects of the verbal system.

The Latin system differs from the Greek not only in losing some of the categories retained in Greek but also in introducing some semantic oppositions not distinguished in Greek. One example is the fact that Latin has

17. *Parco* actually means ‘I am merciful, I spare’; according to tradition, Latin and Greek verbal lemmata are cited in the first singular and English in the infinitive. When referring to the verb generally (and not its first singular), I follow this practice.
18. See Hofmann & Szantyr (1965 §§ 168a, 178), Leumann (1977 §§ 391–392, 432–441), Sihler (1995 §§ 522–529), and Baldi (2002: 366–367, 377–383, 398–399); cf. Meiser (2003: 3–4, 83–90).
19. So, e.g., Sihler (1995 § 522) and Baldi (2002: 71–72, 367); for a different view see, e.g., Schwink (1996).

merged two roots, $*h_1es$ and $*b^huH$ ($*h_1es > esse$ 'to be' and $*b^huH >$ Eng. *be* and Lat. *fio* 'become'), into the single verb *esse*; this means that Latin can express a semantic difference between a "perfective" and an "imperfective" sense in the past tenses of this verb – that is, the difference between *fui* and *eram*.[20]

Agency and actionality were indicated by a number of verbal affixes. Several languages, among them Latin and Gothic, indicate telicity with prefixes. In Russian the old Indo-European distinction between atelic and telic actionality has developed one step further into a system where the opposition between imperfective and perfective verbs often corresponds to the opposition between imperfective and perfective viewpoint that is frequently expressed elsewhere by the different past tenses, such as the imperfect and aorist in Greek or the imperfect and perfect in Latin.[21] Early Slavic and Modern Bulgarian have a complex system of actionality expressed by affixes and combined with a still rather complex verbal system consisting of three aspectual stems.[22] However, the languages with more fully developed actional systems often seem to be those in which the division into three aspectual stems is no longer present: prefixes or particles have such functions in for instance Celtic, Germanic, Anatolian, and Slavic, whereas the Tocharian opposition between "durative" and "nondurative" verbs is expressed by suffixation.[23]

There are, in other words, considerable differences in the way the genetically related Indo-European languages express tense, actionality, and viewpoint. This means that such systems may be subject to change, and this is the case in Latin: the relationship between these parameters changes in the development from Proto-Indo-European to Latin and from Early to Late Latin.

20. See Sihler (1995 §§ 491–496) and Baldi (2002: 397–398).
21. See, e.g., Lloyd (1979), Haverling (2000), and Forsyth (1970).
22. See, e.g., Comrie (1978: 125–126), Dahl (1994: 245–246), and Johanson (2000: 139–142); on the development of the Slavic aspect system, see also Forsyth (1972).
23. See, e.g., Sims-Williams (1998: 368–373), Ramat (1998: 403–407), Andersen (1998: 443–447), and Winter (1998: 164–168).

2. Actionality

In Early and Classical Latin, agency, actionality, and focus are clearly indicated by a number of verbal affixes. Proto-Indo-European had a number of affixes by which new verbs were formed which expressed, among other things, causativity and various kinds of dynamicity.[24] The Proto-Indo-European system of various suffixes has developed into a Latin system consisting of five different conjugational classes. In some cases, Indo-European suffixes with very different functions have merged in the same conjugation, for instance *-eh_1- (= -ē-), which marks stative intransitives (*sedeo* 'be seated', *taceo* 'be silent', etc.), and *-eye-, which marks causatives (*moneo* 'warn', *doceo* 'teach').[25]

In some cases, the same suffix occurs in different functions, as with the old Indo-European suffix *-sco*, which is particularly productive in Latin and which according to some early attestations seems to have been of importance in other early Indo-European languages in Italy as well.[26] Latin has it in some verbs of Indo-European descent (*$gneh_3$ + -*sk*- > *nosco* 'try to get to know'), in intransitive verbs formed from transitive verbs (*augeo* 'increase, intensify' / *augesco* 'increase, grow'), in verbs formed from intransitive and dynamic verbs (*permano* 'flow through, seep, percolate' / *permanasco* 'seep through gradually, penetrate'), in verbs formed from stative verbs (*areo* 'be dry' / *aresco* 'become drier, be drying, dry'), and in verbs formed from adjectives (*siccus* 'dry' / *siccesco* 'become dry, be drying') and nouns (*silua* 'forest' / *siluesco* 'become like a forest, put forth thick growth, bush out').[27]

The semantic quality of a Proto-Indo-European verb could be changed by particles, which in the later stages of development often turned into prefixes and prepositions. In several Indo-European languages these particles or prefixes were used as markers of various kinds of actionality.[28] Under the in-

24. See Beekes (1995: 220–222), Szemerényi (1996: 266–280), and Watkins (1998: 58–59).
25. See, e.g., Beekes (1995: 228–232), Sihler (1995 § 477), Baldi (2002: 371–376), and Meiser (1998 §§ 123–127).
26. Cf., e.g., the combination of the root *$steh_2$ with *-sco* assumed by some scholars in an inscription from Tortora: see Lazzarini and Poccetti (2001: 168–180).
27. See Keller (1992) and Haverling (2000: 137–139).
28. See, e.g., Beekes (1995: 220–222) and Baldi (2002: 87–88, 358–360).

fluence of the discovery of the aspectual distinction in the Slavic languages, scholars suggested that a similar difference might be detected in Latin between prefixed (*comedo* 'eat up') and unprefixed verbs (*edo* 'eat'). It was, however, soon observed that there are considerable differences between the aspectual distinction made in the North Slavic languages and the actional distinction made in Latin.[29] More recent studies have focused on the different functions of the verbal prefixes and the relationship between the prefixes.[30]

The prefixes often express such things as (a) change from one state to another; (b) completion (the opposition between an atelic activity or process and a telic accomplishment); (c) egressivity (specifying the final phase); (d) ingressivity (specifying the entrance into a state or dynamic situation); or (e) perdurativity (indicating an action carried out throughout a period). As shown in Table 2, prefixes have somewhat similar functions in Latin, Gothic, and Slavic. Latin verbs with *per-* sometimes correspond to the Russian perduratives, but Russian differs from Latin and Gothic in that it does not indicate change from one state to another by the opposition between prefixed and unprefixed verbs and in that its telicity opposition has merged with the viewpoint opposition.[31]

The prefix *con-* in Latin and the prefix *ga-* in Gothic indicate completion and occur in verbs describing a change of state.[32] Latin differs from Gothic, however, in normally needing a dynamic suffix, for instance *-sco*, as well as a prefix to indicate the change from one state to another, as illustrated in Table 3. When there is also a prefixed but unsuffixed verb, the prefix does not indicate change of state, but for instance the intensity of the action, as in

29. For bibliography see Hofmann & Szantyr (1965 §§ 167–169); cf. García-Hernández (1985) and Haverling (2000; for an overview of the discussion see 13–15).

30. See García-Hernández (1980, 1985, 1989, 1995); and Haverling (1994, 1996a, 1996b, 2000). On the "spatial" functions of the prefixes and prepositions, see C. Lehmann (1983). There are also particular studies on various prefixes: on the prefixes *ex-* and *de-* see Brachet (2000) and on *ob-* see van Laer (1998).

31. See Forsyth (1970: 20–31, 46–56), Lloyd (1979: e.g. 91–111, 315–319), and Haverling (2000: 249–393); cf. Johanson (2000: 55–57, 58–63, 68–70).

32. Leumann (1975) did not consider *con-* and *ga-* as related, but other scholars disagree: see H. B. Rosén (1992); on the Gothic prefix *ga-* see, e.g., Josephson (1977) and Lloyd (1979); and on the Hittite particle *kan*, presumably related to these two, see, e.g., Josephson (1972: 368–384) and Boley (1989: 75–91, 93, 335).

Table 2. Functions of prefixes in Latin, Gothic and Russian

	Latin	Gothic	Russian
(a)	*dormio* 'sleep' / *condormisco* 'fall asleep'	*slepan* 'sleep' / *gaslepan* 'fall asleep'	–
(b)	*edo* 'eat' / *comedo* 'eat up'	*matjan* 'eat, dine' / *gamatjan* 'eat up'	*pisat'* 'write' (impf.) / *napisat'* 'write (pf.; e.g., a letter)'
(c)	*exaresco* 'get totally dry'	*usbliggwan* 'beat up'	*dogoret'* 'burn out'
(d)	*inaresco* 'start drying, get somewhat dry'	*anaslepan* 'fall asleep'	*zaplakat'* 'start to cry'
(e)	*peruigilo* 'be awake for an entire period of time'	–	*progovorit'* 'talk for an entire period of time'

Table 3. The functions of *con-* in Latin and *ga-* in Gothic

(a)	Latin	*dormio* 'be asleep' (2nd c. BCE)	*condormisco* 'fall asleep' (2nd c. BCE)	*condormio* 'be fast asleep' (1st c. CE, prose)
	Gothic	*slepan* 'sleep'	*gaslepan* 'fall asleep'	
(b)	Latin	*taceo* 'be silent, say nothing' (2nd c. BCE)	*conticesco* 'stop talking' (2nd c. BCE)	*conticeo* 'stop talking' (1st c. CE, poetry)
	Gothic	*slawan* 'be silent'	*gaslawan* 'become silent'	
		þahan 'be silent'	*gaþahan* 'stop talking'	

condormio 'be fast asleep' (Table 3: (a); (22) below, Section 2.1.3). There are also some rare prefixed but unsuffixed verbs which only occur in poetry and which express change of state (Table 3: (b); (26a) below, Section 2.1.4).[33]

33. See Haverling (2000: 252–267).

In the indication of various actional functions, Latin differs from Greek, where some such properties may be expressed by different tense or diathetic forms. Greek, which in its Early and Classical periods still has the famous system of three aspectual stems, has particles (as often in Homer) or prefixes (in the later periods) that express different semantic qualities, but the difference between an unprefixed and a prefixed verb is often one of style and dialect rather than of semantic function, as between εὕδω (poetry) and καθεύδω (Attic prose) 'sleep' or θνήσκω (poetry) and ἀποθνήσκω (Attic prose) 'die'. In these cases, Classical Latin makes clear actional distinctions with different verbal affixes (*dormio* 'be asleep, sleep' / *con-* or *obdormisco* 'fall asleep', *morior* 'be dying, die'/ *emorior* 'pass away, leave life'), and a similar system is found in Gothic (*slepan* 'sleep' / *gaslepan* 'fall asleep', [**dauþnan*] / *gadauþnan* 'die' / *miþgadauþnan* 'pass away').[34]

The different semantic qualities expressed in Latin by prefixed and unprefixed verbs may in Greek in some instances be expressed by the opposition between the imperfect and the aorist tenses of a single verb. Where Latin has the two verbs *suadeo* 'try to persuade' and *persuadeo* 'persuade', Greek makes do with only one, πείθειν 'persuade' (although it possesses the prefixed verb ἀναπείθειν 'persuade, convince' as well), whereas Russian expresses this difference with the opposition between imperfective and perfective verbs (cf. (353)–(355) below, Section 4.1.6).[35] There is, in other words, a connection between the structure of the lexicon and the organization of the verbal system in Indo-European languages.[36] There is also a connection between the changes in the actional system from Early to Late Latin and the changes in the system of tenses and in the way viewpoint is expressed in Latin.

Normal human language does not distinguish all the actional categories defined by philosophers and linguists, but all languages express some of them and do so in different ways. In this section I focus on the categories expressed

34. On the verbal prefixes in Greek see, e.g., Brunel (1939); on Gothic see Lloyd (1979: 131–134, 166, 275); for a comparison of the Greek and Latin systems, see Haverling (2006c).
35. See, e.g., Comrie (1978: 19).
36. For a discussion of the lexical structure and the transformation from active to nominative/accusative structure, see W. P. Lehmann (2002: 64–99).

by the morphology of the Latin verbs and the way this system changes over the centuries.[37]

2.1 Early and Classical Latin

2.1.1 ±dynamic

States are nondynamic and durative and characterized by lack of internal development of the action itself. *Activities* differ from States in being dynamic, but they resemble States in being durative and atelic. States, like Activities, are compatible with expressions of simple duration,[38] such as ‘for an instant’ or ‘for two years’, and there are such expressions with verbs in the infectum like statives with the suffix *-ē-* (from **-eh$_1$-*), such as *sileo* ‘be silent’ (1), and with dynamic and atelic verbs like *frustror* ‘frustrate, fool’ (2). In the perfectum there are expressions of simple duration with stative perfect tense forms like *fui* ‘was’ (3) and dynamic perfect tense forms like *ierunt* ‘walked’ (4). In the present tense these verbs often indicate “anterior continuing” when accompanied by these adverbials (2), as opposed to the perfect tense, which indicates that a situation or action does not continue into the present (cf. (307)–(308) below, Section 4.1.3). In the examples, bold type marks the verb form(s) under discussion and roman type emphasizes various other expressions of importance for the interpretation of those verbs.

(1) Ov. *met.* 9,472: ***silet*** *illla* diu
‘she lies still and silent for long’

(2) Plaut. *Most.* 588: multos *me . . . iam* dies ***frustramini***
‘day after day you have now fooled me’

37. Dressler (1968: 49–51) operates with the concept “Verbalcharakter”, the actional function of any verb or verbal phrase; and he reserves the term “Aktionsart” for functions indicated by prefixes, suffixes, etc. (“Mit modifizierenden Präfixen, Suffixen u.ä. abgeleitete Verba gehören Aktionsarten an, die übrigen Verba haben bloß einen Verbalcharakter”).

38. See, e.g., Comrie (1978: 50), Smith (1997: 23–24, 27–28, 32, 41, 176), Johanson (2000: 61, 64–66, 73–74), Bertinetto and Delfitto (2000: 199–201); and cf. Haverling (2000: 61–65).

(3) Cic. *Att.* 7,4,2: ***fuimus*** *una* horas duas *fortasse*
‘we were together for two hours perhaps’

(4) Liv. 33,6,9: per diem totum … *nullo conspecta inter se loco agmina* ***ierunt***
‘the two columns marched all day, nowhere seeing each other’

Latin, as opposed to some other languages, has verbs that indicate states.[39] In Early and Classical Latin the semantic opposition between a *state* (“nondynamic”) and an *activity* (“dynamic” and “atelic”) is often expressed by the use of different affixes, notably suffixes and infixes. Many of these are intransitive stative verbs with the Indo-European suffix **-eh$_1$-*.[40] In this respect there is a structural difference between Latin and the later Romance languages, where such semantic functions are often rendered by a verb and an adjective. For instance, in the sense ‘he is old’ (Fr. *il est vieux*), Early and Classical Latin usually has *senet* (5a), although the expression *senex est* exists too, such as when there is a modifying adverb like *tam* ‘so’ (5b); and in the sense ‘it is hot’ the verb *calet* (6a) occurs more often than an expression like *calidum est* (6b).[41]

(5) a. Pacuv. *trag*. 305 ap. Prisc. *gramm*. 10 p. 512 line 7: *quamquam aetas* ***senet****, satis habeam uirium ut te ara arceam*
‘although my years are old, may I have strength enough to bar you from the altar’
b. Sen. *epist*. 12,6: *deinde nemo* tam ***senex est*** *ut inprobe unum diem speret*
‘moreover, no one is so old that it would be improper for him to hope for another day of existence’

39. For instance, in Arabic, the opposition between ‘to be something’ and ‘to become something’ is expressed by the difference between the stative nonverbal and the dynamic verbal expression: cf., e.g., Godel (1950).
40. See Leumann (1977 § 410.2.c) and Sihler (1995 § 452); cf. Haverling (2000: 207).
41. The use of stative verbs instead of adjectives + copula is found in active languages, which usually have no or very few adjectives; see W. P. Lehmann (2002: 29, 36, 79–81).

(6) a. Plaut. *Bacch.* 105: *aqua* ***calet****: eamus hinc intro ut laues*
‘the water is hot: let us go inside so that you may bathe’
b. Plaut. *Most.* 610: ***calidum*** *hoc* ***est****: etsi procul abest, urit male*
‘this is pretty hot. I am getting well singed even at this distance’

In the Latin texts contained in the *Bibliotheca Teubneriana Latina* (*BTL*), there is one example of *aqua calet* ‘the water is hot’ (6a), one of *aura tepet* ‘the air is relatively warm’ (Ov. *trist.* 3,10,1), and ten of *friget Venus* ‘love is cold’ (of which one is in Ter. *Eun.* 732 and nine are quotations in Cicero and in the later grammarians); there is no example of the corresponding forms with an adjective (e.g., **aqua calida est*) and in all the over eighty examples of *aqua calida* the adjective is attributive (‘the hot water’). In later Latin, however, this old suffix gradually loses ground and eventually *calet* ‘is warm’ is replaced by expressions like *calidum est* (cf. (65) and Table 10 below, Section 2.2.1).[42]

Stative expressions are normally incompatibile with expressions of dynamism, such as adverbials of speed or conveying the idea of change or presupposing some kind of internal change; with expressions of agency, such as instrumental adverbials; and with expressions of volition, such as adverbials of manner, imperatives, and verbs such as ‘persuade’.[43] Verbs with the stative suffix *-ē-* are not generally found with expressions conveying ideas of speed or change, but the *sco*-verbs are often found with such expressions, as exemplified by *aresco* ‘dry’ (7a) and *senesco* ‘grow old’ (7b). The instrumental adverbial *remis* ‘with the oars’ is found as an adjunct to *canesco* ‘become (more) white’ (8a); and when the adverbial *remis* appears in a phrase with the stative verb *canet* ‘is white’, it is an adjunct not to the finite verb but to the participle *eruta* ‘stirred’ (8b).[44]

(7) a. Cic. *inv.* 1,109: *lacrima nihil* citius ***arescit***
‘nothing dries as fast as a tear’

42. See C. Lehmann (1995); cf. also Iliescu (1990) and Haverling (2007); on the “stative” verbs in *-ē-* in Latin see Hocquard (1981).
43. See Smith (1997: 32–36, 40, 176, 182–184); cf. Johanson (2000: 64–66).
44. See Haverling (2000: 44–53). Compare *caleo* (stative) / *calesco* (“inchoative”): this is referred to as an “aspect” by Croft (1990: 177); cf. Bybee (1985: 15).

b. Cic. *Cato* 38: *ita* sensim *sine sensu aetas* ***senescit***, *nec subito frangitur, sed diuturnitate extinguitur*
'thus old age comes upon us gradually, and we are not suddenly broken but we are destroyed over a longer period of time'

(8) a. Ov. *epist.* 3,65: *quam sine me Pthiis* ***canescant*** *aequora* remis
'without me the seas foam white with Pthian oars'
b. Ov. *epist.* 5,54: *et* remis eruta ***canet*** *aqua*
'the water foams white with the churning of the oar'

There are, however, cases where adverbials that imply speed, such as *suddenly* (*suddenly Mary knew the answer*), or imperatives are found with seemingly stative expressions; the adverbial then refers to the change of state and not to the state itself. Latin has some unsuffixed verbs like *taceo* 'be silent' (9a) and *timeo* 'be afraid' (9b) in the imperative; of these the latter often occurs in negated imperatives. In such cases the reference is to a change of state, and such constellations are possible only when the change from one state to another is under the control of the subject. There are also stative verbs like *habeo* 'have' or *sum* 'be' with adverbials meaning 'suddenly' ((10); cf. (51) below, Section 2.1.7).[45]

(9) a. Plaut. *Pseud.* 952: *st!* ***Tace***, *aedes hiscunt*
'sh-h! Shut up! The house is opening up!'
b. Plaut. *Mil.* 1346: *ne* ***time***, *uoluptas mea*
'do not fear, my heart's delight'

(10) a. Cic. *Q. Rosc.* 8: *quid fingat* extemplo *non* ***habet***
'he does not immediately know what to invent'
b. Plaut. *Merc.* 295: *senex quom* extemplo ***est***, *iam nec sentit nec sapit*
'once a man gets old he reaches the senseless, witless stage'

Several *sco*-verbs appear embedded under verbs like *praecipio*, *moneo*, and *rogo* 'ask', *persuadeo* 'persuade', and *cogo* 'compel'; but *taceo* 'be silent' and *misereo* 'be sorry' also occur in such constructions. When such verbs occur in imperatives or embedded under verbs like *rogo* 'ask' or *cogo* 'compel',

45. On "inceptive focus" see, e.g., Smith (1997: 49); cf. Haverling (2000: 45–48).

what is under control is the change into a state and not the maintenance of the state.[46]

Verbs that mean 'begin, start' are Achievements; when they occur with *sco*-verbs like *extimesco* 'become afraid' (11a) and *rubesco* 'become red(der)' (12a), the focus is inceptive and they describe the entrance into an event or process; when they occur with unsuffixed verbs like *timeo* 'fear' (11b) and *rubeo* 'be red' (12b), the focus is inchoative and they describe the entrance into a state.

(11) a. Cic. *Tusc.* 5,3: incipio … *interdum et humani generis imbecillitatem fragilitatemque* ***extimescere***
'there are moments when I begin to feel exceeding fear of the weakness and frailty of mankind'
b. Cic. *Att.* 8,8,1: *eundem repente* ***timere*** coeperat
'then he suddenly began to fear him'

(12) a. Ov. *met.* 3,600–601: *nox ubi consumpta est (Aurora* ***rubescere*** *primo /* coeperat*), exsurgo*
'the night was spent there; as soon as the eastern sky began to redden, I rose'
b. Cels. 2,10,17–19: *si rubet et perlucet, integer est … Siue autem primo siue secundo die sanguis … et* ***rubere*** *et* ***pellucere*** coepit
'if red and translucent, it is sound. Whether it be on the first day or on the second that the blood begins to be red and translucent'

The opposition stative/dynamic is thus often represented by a morphological opposition in Latin.

2.1.2 Agency, voice, and ±dynamic

The fundamental semantic function of the *sco*-suffix is dynamic and atelic, which means that, unprefixed, such verbs usually describe ongoing processes rather than changes. There are some old causative verbs with *-ē-*, such as

46. See, e.g., Smith (1997: 40) and Pinkster (1995: 22). The *OLD* (s.v. *taceo* 2) is wrong when it states that *taceo* means 'stop talking', i.e., *conticesco*, when found in such constructions: cf. Haverling (2000: 47–48).

augeo ‘increase, intensify’ (13a). The dynamic suffix *-sc-* makes the transitive verb intransitive, as in *augesco* ‘increase, grow’ (13b). There is also a set of causative verbs in *-ā-*, as in *inuetero* ‘make old, allow to become old’, which has the intransitive relative *inueterasco* ‘grow old’ (cf. (68)–(71) below, Section 2.2.2). There is a certain competition here between the intransitive *sco*-formations and passive forms of the transitive verbs. Compare *alitur* ‘is nourished’ and *alescit* ‘grows’ (14). Greek frequently has a mediopassive where Latin uses a *sco*-verb and modern Romance a reflexive: in the sense ‘warm up’, for instance, Greek has θερμαίνομαι, whereas Latin has *calesco* and Italian *mi riscaldo*.[47]

(13) a. Ter. *Ad.* 24–25: *facite aequanimitas / poetae ad scribendum* ***augeat*** *industriam*
‘see that you give the play a fair hearing and encourage the author to continue with the task of writing’
b. Ter. *Haut.* 423–424: *nam mihi quidem cotidie* ***augescit*** *magis / de filio aegritudo*
‘in my case my sorrow for my son increases day by day’

(14) a. Varro *rust.* 1,45,3: *nam radices autumno aut hieme magis sub terra quam supra* ***alescunt***
‘thus roots grow faster below than does the part above ground in autumn and in winter’
b. Cic. *nat. deor.* 2,124: *e quibus pulli orti primo* ***aluntur*** *ab his ut a matribus*
‘and the chicks that spring from the eggs are at first fed and mothered by them’
c. Cic. *nat. deor.* 2,23: *quod autem* ***alitur*** *et* crescit *motu quodam utitur certo et aequabili*
‘but that which is nourished and grows possesses a definite and uniform motion’

Latin thus often employs the old Indo-European suffix *-sco* to indicate dynamicity and sometimes to indicate intransitivity. In a few relatively early

47. See Berrettoni (1971: 131–132); cf. Reichenkron (1933: 3), Rohlfs (1949–1954, 3 § 741).

verbs of this type, however, the semantic opposition is between different degrees of dynamicity. In such cases the unsuffixed verb describes the action generally, whereas the unprefixed *sco*-verb emphasizes the progressive nature of that action. *Labo* means 'stand unsteadily, be shaky, totter, waver' (15a) and *labasco* 'be shaking, wavering' (15b).[48]

(15) a. Cato *agr.* 20,1: *caueat ni* ***labet*** *columella: si mouebitur, eximito*
'it should prevent it from shaking; if it moves, take it out'
b. Plaut. *Rud.* 1394: *leno* ***labascit****, libertas portenditur*
'the pimp falters! Freedom for me!'

The *sco*-suffix thus indicates atelic dynamicity. Another suffix that indicates atelic dynamicity is the iterative and intensive suffix *-tare* (*-ssare/-itare*), which often indicates that an action is repeated, as in *uentito* 'come often' (16a) or *rogito* 'ask repeatedly, inquire' (16b), and which occurs with *-sc-* in the verb *noscito* 'investigate' (16c).[49] Iterativity is related to pluri-occasionality, which is sometimes the effect when a telic or momentaneous verb occurs in the imperfective viewpoint (cf. (297)–(300) below, Section 4.1.2) and is atelic in character.[50]

(16) a. Nep. *Att.* 4,4: *nam et ad comitia eorum* ***uentitauit*** *et, si qua res maior acta est, non defuit*
'because he used to attend the meetings of their local assembly, and if some matter of importance was discussed he was never absent'
b. Plaut. *Poen.* 108–109: ***rogitat*** *postibi, / Vnde sit, quoiatis, captane an surrupta sit*
'then he inquires where she is from, what country, whether she was captured in war or kidnapped'
c. Plaut. *Trin.* 864: circumspectat *sese atque aedis* ***noscitat***
'he is looking around him and is investigating the house'

48. See Haverling (2000: 155–157, 170–173).
49. See Leumann (1977 § 412.B); cf. Bybee, Perkins and Pagliuca (1994: 140–144).
50. See Smith (1997: 24, 50) and Johanson (2000: 55); cf. also Dressler (1968: 60–62) on the relationship between iterativity and viewpoint; Sjoestedt (1925) regarded the iterative verbs with *-tare*/*-sare* as aspectually marked ("imperfective").

The function of the *sco*-suffix sometimes overlaps with that of the middle in Greek and the passive in Latin. Voice and actionality are thus related phenomena. The Latin deponents are a group of often atelic verbs of interest from this point of view. It is a heterogeneous group, which probably reflects several lines of development from the Proto-Indo-European middle. This group includes verbs with a recoverable middle meaning like *utor* 'make use of' (17a), *orior* 'arise, get up' (17b), and *proficiscor* 'set out, make a journey' (17c).[51] Of these deponents the generally atelic *utor* 'use' was replaced by ordinary active verbs (It. *usare* 'use'), whereas the "initio-transformative" *orior* 'arise, get up' and *proficiscor* 'set out, make a journey', which indicate both change into a process and the process itself,[52] in Romance have often been replaced by reflexive verbs, such as Fr. *se lever* and *s'en aller* (cf. (72) below, Section 2.2.2).[53]

(17) a. Plaut. *Mil.* 799a: *ego recte meis auribus* ***utor***
'I know how to use my ears'
b. Sen. *nat.* 5,16,3: *non eodem semper loco sol* ***oritur*** *aut occidit*
'the sun does not always rise and set in the same place'
c. Plaut. *Merc.* 946: *nauem conscendo,* ***proficiscor*** *ilico, iam sum domi*
'I go on board, I set out immediately, I am already at home'

Voice is also of interest in stative expressions; in the sense 'hide, be hiding', Early Latin has the old stative verb *latere* (e.g., Plaut. *Cas*. 664) as well as the reflexive *se occultare* (e.g., Plaut. *Mil*. 582). In this case too, the later development favored the use of a reflexive expression (cf. It. *nascondersi*, Fr. *se cacher*).

51. The latter verb seems to preserve the original meaning of the root $*d^{h}eh_{1}$- 'put, place', from which the Latin verb *facio* 'make' was formed, and hence *proficiscor* originally meant 'I put myself forward': see Baldi (2002: 395–396); cf. Leumann (1977 § 447.I.B); on the deponents in Latin, see Flobert (1975).
52. See Johanson (2000: 58–59, 62–63, 67).
53. Cf. Väänänen (1981 § 293).

2.1.3 States, activities, and prefixes

Prefixes often have an actional function in Latin, but sometimes the function is spatial and not directly actional.[54] The prefixes are found in their spatial functions in the unsuffixed verbs *perluceo* 'transmit light, be transparent, shine through' (18) and *indormio* 'sleep in, on, or over sth., sleep through (e.g., a lecture)' (19).[55] *Con-* is often sociative in the sense 'with, together with'. It appears in expressions of collocation or simultaneity, as in *conuenio* 'come together' (20a), of connection or partnership, as in *commilito* 'fight on the same side' (20b), and of enclosure or containing, as in *contineo* 'hold together, surround, enclose, contain' (20c).[56]

(18) Plaut. *Aul.* 566: *ita is* ***pellucet*** *quasi lanterna Punica*
'it is as transparent as a Punic lantern'

(19) Hor. *sat.* 1,1,70–71: *congestis undique saccis /* ***indormis*** *inhians*
'you sleep with open mouth on moneybags piled up on all sides'

(20) a. Plaut. *Men.* 30: *mortales multi, ut ad ludos,* ***conuenerant***
'many people had congregated, as they do at festivals'

b. Flor. *epit.* 3,5,23: *quippe quasi* **commilitans** (luna) *cum a tergo se hostibus, a facie Romanis praebuisset*
'since the moon almost fought on the side of the Romans, when it spread its light on the back of the enemies and in the face of the Romans'

c. Cic. *Verr.* II 4,117: *pars oppidi … mari disiuncta angusto ponte rursus adiungitur et* ***continetur***
'a part of the town being cut off from the rest by a narrow strip of sea is reunited with it by a connecting bridge'

Another function of *con-* is to indicate intensity. It emphasizes the intensity of a state in *commoror* 'stay (on), remain, delay, wait' (21a) and the intensity of a dynamic situation in a verb like *consudo* 'sweat profusely' (21b). In my view

54. On the "spatial" functions of the prefixes and the prepositions, see C. Lehmann (1983); cf. also García-Hernández (1980: 126–128).
55. See Haverling (2000: 288, 349–350).
56. See Haverling (2000: 267–272).

this is the function of *con-* met with in some verbs that have corresponding dynamic relatives with the *sco*-suffix, for instance *condormio* 'be fast asleep' (22).[57]

(21) a. Sall. *Catil.* 36,1: *sed ipse* paucos dies ***conmoratus*** *apud C. Flaminium … ad Manlium contendit*
'after spending a few days with Gaius Flamininius he hastened to join Manlius'
b. Cato *agr.* 96,1: *sinito* biduum *aut* triduum ***consudent***
'let them sweat profusely two or three days'

(22) a. Suet. *Aug.* 78,2: *et dum per uicos deportaretur …* ***condormiebat***
'and while he was being carried around in the streets he was fast asleep'
b. Hyg. *fab.* 125,15: *cum Vlysses* **condormiret**, *socii inuolarunt pecus*
'while Ulysses was fast asleep, his comrades stole the sheep'

The circumstance that Latin normally needs a dynamic suffix or infix as well as a prefix to create change-of-state verbs from stative verbs has not received due consideration in the discussion; this means that some rare verbs are incorrectly defined in the dictionaries and that a rare poetic verb such as *conticeo* is sometimes indicated as the verb meaning 'stop talking' although the infectum normally found in that function is *conticesco* (cf. (26a) below, Section 2.1.4).[58]

2.1.4 States and change

Latin has the verbal suffix *-ē-* indicating state, as in *calet* 'is hot' ((6a) above, Section 2.1.1); there are also stative verbs with other suffixes, such as *-ī-* in *dormis* 'you are asleep' (24a). The dynamic suffix *-sc-* adds dynamicity

57. See Haverling (2000: 252–253, 261–262); cf. H. B. Rosén (1992).

58. Cf. the *OLD* s.v. *concaleo* 'be or become warm' and Leumann (1977 § 407.II.B.2); cf. Brugmann (1904 § 737), Barone (1908: 19), Meyer (1917: 3), and García-Hernández (1985: 520); see Haverling (2000: 218–225, 265–266).

to the stative verb, as in *calescit* 'it is getting warmer' (23a); the *sco*-verbs become telic and indicate change of state with the help of the prefix *con-*, as in *concalescunt* 'become warm' (23b) and *condormiscit* 'falls asleep' (24b).

(23) a. Cic. *nat. deor.* 2,138: *nam quae spiritu in pulmonum anima ducitur, ea* ***calescit*** *primum ipso ab spiritu, deinde contagione pulmonum*
'the air drawn into the lungs by breathing is warmed in the first instance by the breath itself and then by contact with the lungs'
b. Cic. *Tusc.* 1,42: *quia corpora nostra, terreno principiorum genere confecta, ardore animi* ***concalescunt***
'that our bodies, which are fashioned from the earthy class of elements, are heated by the glow of the soul'

(24) a. Ter. *Phorm.* 1007: *dum tu* ***dormis***
'while you are fast asleep'
b. Plaut. *Curc.* 359–360: *ille ebibit / caput deponit,* ***condormiscit***
'he empties his cup, puts down his head, and falls asleep'

In several cases where dynamic verbs were formed from stative ones, there is a semantic opposition between an unprefixed stative verb and a prefixed and otherwise affixed dynamic one: for example between *sedeo* 'be sitting' (25a) and *consido* 'sit down' (25b). There is also the dynamic unprefixed verb *sido*, which means 'sink to a lower level' in prose (25c) and is found in the sense 'sit down' in poetry (25d).[59]

(25) a. Plaut. *Stich.* 93: *non* ***sedeo*** *isti, uos* ***sedete****; ego* ***sedero*** *in subsellio*
'not I, you two sit there. I'll sit on this bench myself'
b. Cic. *de orat.* 3,18: *in siluam uenitur et ibi ...* ***considitur***
'we come to the wood and take our seats there'
c. Vitr. 2,3,2: *ipsi* (lateres) ***sidentes*** *non possunt eandem altitudinem ... tenere*
'they settle and cannot keep the same height as the plaster'

59. See Leumann (1977 §§ 30, 405.b,); cf. Haverling (2000: 207–208).

d. Verg. *Aen.* 6,203: (columbae) *sedibus optatis gemina super arbore **sidunt***
'the doves settle on the site longed for, the twofold tree'

In Early and Classical Latin, the semantic opposition between state ("nondynamic") and activity ("dynamic" and "atelic") and between atelicity and telicity is often expressed by the use of different affixes, as indicated in Table 4. The difference between state and activity is often indicated by an affix, as in the opposition between stative verbs with the suffix *-ē-* or *-ī-* and dynamic verbs with the suffix *-sco* (Table 4: (a)); or with a stative verb in *-ē-* or *-ā-* and an original reduplication (Table 4: (b)) or a nasal infix (Table 4: (c)).[60] The opposition between atelic and telic actions is often indicated by the opposition between a nonprefixed and a prefixed verb (Table 4: (a), (b), (c)).[61] As opposed to, for instance, Gothic, Latin usually needs a dynamic suffix to form a verb that indicates a change from a stative verb (cf. Table 3).

Table 4. Affixes in the Latin verb

	−dynamic: State	+dynamic, −telic: Activity	+dynamic, +telic (±momentaneous)
(a)	*caleo* 'be hot'	*calesco* 'become warmer, be warming up'	*concalesco* 'become warm'
	dormio 'be asleep'		*condormisco* 'fall asleep'
(b)	*sedeo* 'be sitting'	*sido* 'sink gradually to a lower level'	*consido* 'sit down'
	sto 'be standing'	*sisto* 'cause to stand, stop; take a stand, stand firm'	*consisto* 'come to a halt, take up a standing position'
(c)	*cubo* 'be lying down'		*accumbo* 'lie down'

60. See Leumann (1977 §§ 405–407); and also Szemerényi (1996: 268–279).
61. Cf. Haverling (2000: 207); for an overview of the elements employed in different languages, see Johanson (2000: 55–57).

The prefix *con-* thus frequently indicates change, but it may also indicate intensity (e.g., (21)–(22) above, Section 2.1.3). *Conticeo*, which means 'stop talking, cease making noise', occurs in a poetic passage from the first century CE (26a) and then occasionally in Late Latin passages from the fourth century onward ((76) below, Section 2.2.3). There are more examples of such poetic formations, for instance *ascio* for *ascisco* in the sense 'associate with oneself, adopt, engage' in Virgil (26b).[62]

(26) a. Calp. *ecl.* 4,97–98: *aspicis, ut uirides audito Caesare siluae / **conticeant**?*
'do you see how the green woods are hushed at the sound of Caesar's name?'
b. Verg. *Aen.* 12,38: *si Turno exstincto socios sum **adscire** paratus*
'if, with Turnus dead, I am ready to link them to me as allies'

In the perfectum there is a similar pattern where unprefixed verbs have a stative function and prefixed verbs indicate a change of state. The difference between a state in the past and a change of state in the past is often indicated by a prefix. In Early and Classical Latin, the unprefixed perfect *tacui* occurs in the sense 'I have been silent' with the adverb *adhuc* 'so far' (27a), and the phrase *cum tacuisset* means 'as he had been silent, had not said anything' (27b); the prefixed *conticui* means 'I have fallen silent' or 'I stopped talking' (28a) and *cum conticuisset* 'as he had stopped talking' (28b).[63]

(27) a. 2nd c. BCE: Plaut. *Truc.* 817: ***tacui*** adhuc
'I have kept silent so far'
b. 1st c. BCE: Cic. *Brut.* 226: multos *cum **tacuisset*** annos
'when he had been silent for many years'

62. See Haverling (2000: 224, 265–266).

63. The *OLD* mentions a passage from Sisenna quoted by Nonius which is supposed to have an example of *tacui* = *conticui* already in Classical Latin (Sisenna *Hist.* 45 in Non. p. 365.21: *tum subito tacuit*); but the fact that Nonius frequently drops prefixes is a reason why we should not accept this evidence: cf. Haverling (2000: 55–56, 224).

Table 5. The functions of prefixed and unprefixed perfect tense forms in Classical Latin

−DYNAMIC: STATE		+DYNAMIC: CHANGE OF STATE			
		poetic		prosaic	
rubui	'was red'	*rubui*	'became red'	*erubui*	'became red'
calui	'was warm'	*calui*	'became warm'	*concalui*	'became warm'
tacui	'did not speak'			*conticui*	'stopped talking'
timui	'was afraid'			*extimui*	'became afraid'
dormiui	'was asleep'			*condormiui*	'fell asleep'
sedi	'sat'	*sedi*	'sat down'	*considi*	'sat down'

(28) a. 2nd c. BCE: Plaut. *Asin.* 447–448: tandem ... ***conticuit***
'he has finally stopped talking'

b. 1st c. BCE: Varro *rust.* 1,49,1: *cum* ***conticuisset***
'when he had stopped talking'

This is the system met with in Early and Classical Latin. It should be emphasized, however, that there is a difference between prose and poetry: in Classical prose, *calui* means 'was hot' (e.g., Cael. ap. Cic. *epist*. 8,1,2) and *concaluit* 'became hot' (e.g., Plaut. *Amph*. 513); but in Classical poetry, the unprefixed *calui* is sometimes encountered in a dynamic function, in the sense 'became' or 'grew warm' (e.g., Ov. *met*. 2,171). There are further examples, and the pattern is illustrated in Table 5.[64]

However, this system is not without exceptions. For instance, the unprefixed sigmatic perfect tense form *haesi* 'got stuck; was stuck' (29) is also found in a dynamic sense from Early Latin onward.[65]

(29) Plaut. *Rud.* 984: *ubi demisi retem atque hamum, quidquid* ***haesit*** *extraho*
'when I let down my net and look, I pull up whatever's stuck to 'em'

The ingressive function of the perfect is of importance also in the aspectual opposition. Greek, for instance, regularly uses the aorist tense of stative verbs

64. See Haverling (2000: 225–229).
65. See Haverling (2000: 215–218).

in the stative as well as the dynamic sense ((339), (340), (347) below, Section 4.1.5).[66]

2.1.5 ±telic

One of the functions of the Latin verbal prefixes is to indicate telicity.[67] The unprefixed *sco*-verb *siccesco* ‘be drying’ (30a) and unprefixed perfect *ierunt* ‘they went’ (31a) occur with the durative expressions ‘for two months’ (30a) and ‘for the whole day’ (31a), but the completive temporal expressions ‘in 15 days’ and ‘in thirty days’ are found with the prefixed *sco*-verb *exaresco* ‘become dry’ (30b) and the prefixed perfect *transierit* ‘crossed’ (31b).

(30) a. Vitr. 5,12,4: *relinquatur ne minus* duos mensis, *ut* ***siccescat***
‘it is to be left to dry for at least two months’

b. Varro *rust.* 1,32,1: *frumentum dicunt* quindecim diebus *esse in uaginis,* quindecim *florere,* quindecim ***exarescere***, *cum sit maturum*
‘because they say that the grain is in the sheath for fifteen days, blooms during a period of fifteen days, dries up in fifteen days, and is then ripe’

(31) a. Liv. 33,6,9: per diem totum … *nullo conspecta inter se loco agmina* ***ierunt***
‘the two columns marched all day, nowhere seeing each other’

b. Nep. *Ages.* 4,4: *quod iter Xerxes anno uertente confecerat, hic* ***transierit*** triginta diebus
‘in thirty days he completed the march which had occupied Xerxes for an entire year’

Another example is found in the use of prefixed and unprefixed verbs with the conjunction *dum*, which can mean ‘while, as long as’ (32a) as well as

66. This effect is frequently met with when stativity and perfect or perfectivity are combined: see Bybee, Perkins, and Pagliuca (1994: 74–76, 92–95) and Smith (1997: 70).

67. The terms “telic” and “atelic” were introduced by Garey (1957: 106); for discussion see, e.g., Comrie (1978: 44–48), Lyons (1977, 2: 706–718), Dahl (1981), Smith (1997: 20, 26–29, 41–43), Johanson (2000: 59–66, 67–73), and Bertinetto and Delfitto (2000: 190, 195–203); cf. Haverling (2000: 61–65).

'until' (32b).[68] In (32a) the word *interea* 'meanwhile' refers to the span of time indicated by the *dum*-clause, and (32b) has a durative temporal adverbial *aliquot dies* 'for some days'.

(32) a. Ter. *Ad.* 784–786: *quid ego nunc agam? / Nisi,* dum *haec* ***silescunt*** *turbae,* interea *in angulum / aliquo abeam atque edormiscam hoc uilli*
'what shall I do now, other than retire to a corner somewhere and sleep off this drop of wine while the storm is blowing over?'
b. Plaut. *Mil.* 582–583: *nam iam aliquo aufugiam et me occultabo aliquot dies, /* dum *haec* ***consilescunt*** *turbae atque irae leniunt*
'I shall run away and hide somewhere, until these troubles calm down and their wrath subsides'

Compare the difference between *edo* 'eat, eat of' (33a) and *comedo* 'eat up' (33b) and *bibo* 'drink, drink (some) of' (34a) and *ebibo* 'drink up' (34b). Early and Classical Latin have the unprefixed ((33a), (34a)) as well as the prefixed verbs ((33b), (34b)) with an object in the accusative; a partitive expression in the genitive is found only when there is a word requiring it, for instance the adverb *largiter* 'in great quantity' with *poto* 'drink' in (35a). In a few cases with *de* and the ablative, the semantic function is not partitive; the expression *de alieno* in Plautus means 'at someone else's expense' (35b).[69]

(33) a. Plaut. *Capt.* 77: *quasi mures semper* ***edimus*** *alienum cibum*
'like mice, we are forever nibbling at some one else's food'
b. Plaut. *Most.* 559: *tam facile uinces quam pirum uolpes* ***comest***
'and you will win as easily as a fox eats a pear'

(34) a. Cato *or.* frg. 221: (mulier) *multitatur, si* uinum ***bibit***
'a woman is regularly sentenced to pay a fine, if she drinks wine'

68. See, e.g., Lyons (1977, 2: 711–713), Comrie (1978: 46–47), Johanson (2000: 74), Bertinetto and Delfitto (2000: 195–199); cf. Smith (1997: 124–126); and Haverling (2000: 70–90).
69. Cf. the expressions like *de suo* 'at his or her own expense' in *ThLL* s. v. *de*, vol. 5.1, col. 61, lines 13–83.

b. Cels. 5,27,4: *qui* … acetum, *quod forte secum habebat,* ***ebibit*** *et liberatus est*
'who drank up the vinegar he happened to have with him, and was saved'

(35) a. Plaut. *Truc.* 903–904: ⟨*l*⟩*act ut habeat,* ueteris uini largiter */ ut dies noctesque* ***potet***
'so as to have milk, she must drink a lot of old wine day and night'

b. Plaut. *Poen.* 534: *ubi bibas,* ***edas*** de alieno, *quantum uelis usque ad fatim*
'where you can drink and eat as much as you can want and hold, at another man's expense'

The semantic opposition between an unprefixed, atelic expression and a prefixed, telic one corresponds to that indicated by the presence or absence of the definite article in the languages which have this device (cf. 'drink wine' and 'drink the wine').[70] Early and Classical Greek has the genitive in the sense 'drink of' or 'eat of' and the accusative when a specified amount is consumed; in the latter case the article is often also encountered in Classical Attic.[71] In early Germanic, such as Gothic, there is an interaction between the actional markers on the verbs and the cases: atelic verbs are combined with the partitive genitive and telic verbs with the accusative; this system was eventually replaced by the use of articles.[72] In Romance the opposition between atelic and telic actions with these verbs is often rendered by partitive expressions and by expressions with articles (cf. (80)–(82) below, Section 2.2.4).

2.1.6 ±momentaneous (or ±durative)

Achievements are not regarded as going on for some time: they are –durative and +momentaneous and result in a change of state. The preliminary state, or the preliminary process associated with the change of state, is detached

70. Cf. Hopper (1979), Croft (1990: 177).
71. See Schwyzer (1959, 2: 103); cf. Kühner & Gerth (1898 § 417.2); on Homeric Greek, cf. also Napoli (2006: 112–113).
72. See Abraham (1997), Philippi (1997), and Leiss (2000); cf. Haverling (2003a: 129–131).

conceptually from the event itself. They may be semelfactive, such as ‘he blinked’ or ‘the pebble hit the water’, or indicate changes of state that occur very quickly, such as ‘recognize’, ‘break a glass’, or ‘find’ (36a); and they may presuppose, though not conceptually include, an associated process, as in ‘reach the top of the mountain’ or ‘arrive’ (36b).[73]

(36) a. Caes. *Gall.* 1,29,1: i*n castris Heluetiorum tabulae* ***repertae sunt*** *litteris Graecis confectae*
‘in the camp of the Helvetii *were found* records written out in Greek letters’

b. Cic. *de orat.* 3,18: *in siluam* ***uenitur***
‘we *come to* the plantation’

Accomplishments are dynamic, durative, and telic: they have successive stages and last for a certain length of time and eventually “finish”. In an Accomplishment, the process is conceptualized as a part of the event, and the process part of the event is not detachable from the outcome of the event. Achievements, however, do not conceptually include an associated process, although such a process is often presupposed. Both an Accomplishment (37a) and an Achievement (37b) may occur with completive expressions of duration.[74]

(37) a. Sall. *Iug.* 35,9: *ipse* paucis diebus ***eodem profectus est***
‘he went there in a few days journey’

b. Liv. 36,42,5: *et prospera nauigatione usus* paucis diebus *Piraeum ad ueterem classem* ***peruenit***
‘and after a successful voyage at sea he arrived in a few days at the old fleet in Piraeus’

As opposed to States, Activities, and Accomplishments, Achievements are incompatible with verbs that mean ‘to stop’ (**Paul stops finding the letter*) and ‘to continue’ (**Mary continues finding a book*).[75] In Early and Classical Latin, actional differences are often expressed by different affixes, but in

73. See Smith (1997: 30–31, 46–47).
74. See, e.g., Lyons (1977, 2: 712–714), Comrie (1978: 41–44), Smith (1997: 26–29, 44–47), Johanson (2000: 60–62); cf. Haverling (2000: 61–65, 107–115).
75. See Smith (1997: 45–47) and Johanson (2000: 62, 63).

later periods there is a blurring of the original functions of the prefixes. This development can be followed in the texts, for instance in the growing number of prefixed verbs met with in constructions with verbs meaning 'stop' and 'continue' (e.g., (83b) below, Section 2.2.4).[76]

The semantic opposition between Accomplishments and Achievements sometimes seems to be rendered by verbal morphology in Latin. Expressions like 'wrote a play' (38a) or 'made a bridge' (38b) are telic and durative. The prefix *con-* underlines the change and sometimes seems to indicate momentaneousness; and *confecit prior iter* means 'first finished the march (and arrived first)' (39a) and *librum confeci* 'I finished the book' (39b).

(38) a. Ter. *Andr.* 9: *Menander* ***fecit*** Andriam *et* Perinthiam
'Menander wrote "A Woman of Andros" and "A woman of Perinthos"'

b. Nep. *Milt.* 3,1: pontem ***fecit*** *in Histro flumine, qua copias traduceret*
'he built a bridge over the river Hister for the transport of his troops'

(39) a. Caes. *civ.* 1,70,3: ***confecit*** *prior* iter *Caesar atque ex magnis rupibus nactus planitiem in hac contra hostem aciem instruit*
'Caesar completed the distance first, and finding a plain after crossing the great rocks, he draws up his line therein opposite the enemy'

b. Cic. *Att.* 13,19,3: eos (dialogos) ***confeci***, *et* ***absolui*** *nescio quam bene ... Academicorum omnem quaestionem libris quattuor*
'I have finished them off and have dealt with the whole of the Academic philosophy in four books, how well I cannot say'

However, a complication regarding the classification of the actional forms arises from the fact that one and the same verbal expression may be found in somewhat different functions. The same verb may for instance occur with temporal adverbials having an aspectual implication suggesting an atelic form

76. The test involving verbs meaning 'stop' and 'continue' has been much used by scholars analyzing actionality and verbal aspect: see, e.g., Barbelenet (1913: 130–132), Grassi (1966: 102, 130), Hofmann & Szantyr (1965 § 168.c); cf. Haverling (2000: 107–111).

of actionality ('dine for two hours') or with another indicating a telic form of actionality ('dine in two hours').[77] In (40a), *per triennium … confecit* means 'she fabricated during a period of three years' and the implication is pluri-occasional (on the perfect in this function see (300)–(304) below, Section 4.1.2); whereas *aliquantum eo triduo uiae confecit* in (40b) means 'completed a certain part of the march in those three days'.

(40) a. Cic. *Verr.* II 4,59: *Lamia …* per triennium *isti plena domo telarum* stragulam uestem ***confecit***, *nihil nisi conchylio tinctum*
'Lamia for three years had her house full of looms making woven fabrics for him, and the whole of them dyed with purple'
b. Liv. 21,33,11: *et quia … nec loco magno opere impediebantur, aliquantum* eo triduo *uiae* ***confecit***
'and since they were not hindered much by the character of the place, they covered a certain amount of distance in those three days'

As opposed to States, Activities, and Achievements, the Accomplishments are ambiguous when an adverb meaning 'almost' is added. In an Accomplishment with 'almost', it is unclear whether the emphasis is on the result of the action or on the initiation of it (41a); in (41b) the initial action almost took place, and in (41c) the final result was almost reached.[78]

(41) Cic. *Catil.* 4,19: *cogitate quantis laboribus fundatum imperium … una nox* paene ***delerit***
a. 'think of how one single night almost destroyed the empire which was founded with such great toil'
b. 'in one single night the situation was brought to an extreme point where the final destruction of the empire seemed to be about to take place, but then it never happened'

77. See Smith (1997: 115), Johanson (2000: 66); cf. Dressler (1968: 49–51).
78. See, e.g., Ballweg (1975), Smith (1997: 28), Johanson (2000: 60); cf. also Rohlfs (1949–1954, 3 § 672), Pinkster (1983: 281), and Vester (1983: 19–20) and Bertocchi (1996: 462). Another example is *paene arsit* 'almost caught fire' or 'was almost consumed by fire': cf. Haverling (2000: 114).

c. 'in one single night the destruction of the empire had started, but the ongoing process was stopped before the empire was actually destroyed'

All kinds of actional expressions with *paene* exhibit negative logical entailment, but not all exhibit positive pragmatic implicature. With achievements the implication is always negative in the sense that the action actually did not take place (42). The counterfactual interpretation is also found when *paene* modifies atelic activities, as *paene praecurritis* 'you are almost running ahead of me – but I am actually a little bit ahead of you' (43).[79]

(42) a. Plaut. *Epid.* 200: paene *in cursu* ***concidi***
'I almost fell while running'
b. Plaut. *Poen.* 118: paene ***oblitus sum*** *relicuom dicere*
'I almost forgot to tell you the rest'

(43) Cic. *Catil.* 4,19: *atque haec, non ut uos, qui mihi studio* paene ***praecurritis***, *excitarem, locutus sum*
'I have spoken in this way, not to stir you to action – for your energy usually surpasses mine'

However, with Accomplishments the implication conveyed by *paene* sometimes seems to specify the degree, as in *paene explicatum est* 'it was almost explained', meaning 'it was almost fully explained' (44).[80] This is sometimes the case with states too, as in *paene iniquomst* 'it is almost unfair', meaning 'it is short of being totally unfair and is anything but fair' (45).

(44) Cic. *ac.* 2,10: *heri . . . id quod quaerebatur* paene ***explicatum est***, *ut tota fere quaestio tractata uideatur*
'our inquiry of yesterday was almost fully cleared up, so that nearly the whole of the subject now appears to have been handled'

(45) Plaut. *Capt.* 61: *nam hoc* paene ***iniquomst***
'it would almost amount to imposition'

79. See Bertocchi (1996: 459, 460, 463).
80. Cf. Bertocchi (1996: 462) and Pinkster (1983: 290).

The expression ‘to kill somebody’ has sometimes been regarded as an Achievement, but *paene interfectus essem* (46a) and *paene interfici* (46b) seem to be two-way ambiguous and imply either (i) that someone was on the point of carrying out an action which would have caused the killing (i.e., the initial action almost took place), or (ii) that someone was carrying out an action which almost amounted to killing somebody (i.e., the final result was almost reached). From other sources we know that the first interpretation is the suitable one for (46a), whereas the second is more fitting for (46b).[81]

(46) a. Cic. *Catil.* 2,12: *hesterno die cum domi meae* paene ***interfectus essem***
‘yesterday when I was almost killed in my own home’
b. Cic. *Mil.* 37: *uidi enim, uidi hunc ipsum Q. Hortensium …* paene ***interfici***
‘for I saw, I saw Hortensius himself almost being killed’

However, when an Accomplishment with *paene* is followed by an explicit *nisi*-clause, it is clearly indicated that the initiation of the action never took place (47); and when the action in question is not controlled by somebody’s will ([–Control]), the effect of *paene* is either on the action itself, as in an Achievement like *paene … concidi* ‘I almost fell’ (42a), or on the result of the action as in an Accomplishment like *paene equitatu orbauit Alexandrum* ‘almost deprived Alexander of his cavalry’ (48).[82] When found with verbs with resultative prefixes, *paene* relates to the terminal action. Resultative prefixes are the egressive *ex-*, as in *euanuit* (49a), the completive *con-*, as in *conficio* ‘finish’ (49b), and the ingressive *ob-*, as in *obrigui* ‘turned stiff’ (49c).[83]

81. See Bertocchi (1996: 461 nn. 10–11); cf. the expression *cessatis … occidere* ‘you stop killing’ in Curt. 6,11,14. Dowty (1979: 184), for example, regarded the expressions meaning ‘to kill somebody’ as an achievement.
82. See Bertocchi (1996: 461–462).
83. See Haverling (2000: 252, 317, 327–328). *Exolesco* ‘fade away’ occurs with expressions which imply that it may take some time before the process of disappearing is concluded (e.g., Sen. *nat.* 7,12,8, Colum. 7,3,20) and *euanesco* ‘vanish’ occurs with an expression like *sensim* ‘gradually’ (e.g., Cic. *de orat.* 2,95); see Haverling (2000: 329–330); Vester (1983: 20) was thus wrong in suggesting that *has fores paene confregi* in Plaut. *Most.* 452–457 may exemplify this form of ambiguity; cf. Haverling (2000: 111–112).

(47) Cic. *Att.* 15,26,4: *ego autem si mihi imposuisset aliquid, quod* paene ***fecit*** *nisi tua malitia adfuisset, animo iniquo tulissem*
'if he had imposed something on me, which he almost did were it not for your malice, I would have found it difficult to bear'

(48) Plin. *nat.* 12,33: *frutex pestilens … odore equos inuitans, qui* paene *equitatu* ***orbauit*** *Alexandrum*
'unhealthy grass tempting to the horses because of its scent almost deprived Alexander of his cavalry'

(49) a. Germ. 386: *sic tenuis cunctis iam* paene ***euanuit*** *ardor*
'so the faint light has already almost disappeared from them all'

b. Cic. *prov.* 19: *bellum* adfectum *uidemus et, uere ut dicam,* paene ***confectum***
'we see that the war has been begun, and to tell the truth, almost been finished too'

c. Cic. *Verr.* II 4,87: *ita Sopater de statua C. Marcelli, cum iam* paene ***obriguisset***, *uix uiuus aufertur*
'and so it was that, already nearly frozen stiff, Sopater was removed half-dead from the statue of C. Marcellus'

The semantic function of these expressions with *paene* does not always allow us to conclude whether they are Accomplishments or Achievements. This situation is rendered more complicated by the fact that Latin verbal morphology does not clearly distinguish nonmomentaneous and momentaneous actionality.

2.1.7 Focus and lexicon

There are actional forms pointing to the beginning, middle, or end of an action. *Focus* on endpoints involves telic constellations; they are "fini-transformative". Focus on beginnings, however, may involve both telic and atelic constellations; they are "initio-transformative" and may indicate a change and the ensuing process (change + process) or the ensuing state (change + state). Verbs like 'start' and 'begin' but also for instance 'get' and 'become' have an ingressive, or "initio-transformative", focus. If the focus is "inceptive", it underlines the entry into an event, and the actionality is an Achievement, as in 'they start fleeing in all directions' (50a) or 'suddenly the sea starts to

grow rough' (50b). This effect may also be produced by adverbials meaning 'suddenly' (51a) or 'at once' (51b) (cf. (10) above, Section 2.1.1).[84]

(50) a. Caes. *Gall.* 4,14,5: *reliqua multitudo … passim* ***fugere*** coepit
'the remaining crowd began to flee in all directions'
b. Cic. *rep.* 1,63: *cum subito mare* coepit ***horrescere***
'when the sea suddenly grows rough'

(51) a. Ter. *Ad.* 302: *tot res* repente ***circumuallant se***, *unde emergi non potest*
'all of a sudden we are enclosed by so many things from which there is no escape'
b. Caes. *epist. Frg.* 7: *hoc uos* statim ***scire*** *uolui*
'I wanted you to know this at once'

Often the ensuing process itself is atelic, as in 'get in motion' (change + process; cf. *proficiscor* 'set out, make a journey' in (17c) above, Section 2.1.2) or 'start drying' (52a) or 'warmed up' (52b).[85] If the focus is "inchoative" it may have this focus on the beginning or coming about of a state, and the actionality is an Achievement, as in 'sat down, took up a position' (53a) or 'start being silent, stop talking' (53b). The initio-transformative character of verbs like *inaresco* 'start getting dry, get more and more dry' and *incalesco* 'start getting warm, get more and more warm' is underlined by their occurrence with adverbials indicating gradability (52b).[86] Many inchoatives are of the Achievement type, including those referring to events of cognition, as in *ne cognoscat te habere* 'so that she may not find out that you have', or perception, as in *si … conspexerit* 'if she catches sight of', where the Achievement is followed by a state (54). In their initial readings, such expressions are com-

84. See Smith (1997: 48–49) and Johanson (2000: 56, 68–70, 83); cf. Haverling (2000: 115–121); and Torrego (2002: 387–388).
85. See Smith (1997: 48–49) and Johanson (2000: 59, 62–63). For the terms "transformative" and "non-transformative", see also Sánchez Ruipérez (1954: 53–55) and Raible (1990); for an overview of the various terms proposed in this discussion, see Raible (1990).
86. On gradability, see Lyons (1977, 1: 271–280) and Cruse (1986: 202–204); cf. also Johanson (2000: 60) and Haverling (2000: 121–123).

patible with completive temporal adverbials; and in their stative or dynamic and atelic readings, with those of simple duration.[87]

(52) a. Vitr. 2,4,3: *pinguitudini eius calx palea commixta propter uehementiam non potest sine rimis **inarescere***
'because owing to its richness, the lime when mingled with straw cannot, because of its strength, dry without cracks (appearing in it)'
b. Cels. 2,2,2: *si corpus* supra consuetudinem ***incaluit***
'if the body has been warmed up more than usually'

(53) a. Cic. *de orat.* 3,18: *et ibi magna cum audiendi expectatione **considitur***
'we take our seats there, all eager to listen'
b. Plaut. *Bacch.* 798: *sed* **conticiscam***: nam audio aperiri fores*
'but I shall stop talking: for now I hear the door opening'

(54) Plaut. *Men.* 428–429: *eadem ignorabitur, / ne uxor **cognoscat** te habere, si in uia **conspexerit***
'thus it will look different, so that my wife will not recognize it on you, if she notices it on the street'

Focus on the internal stages involves atelic constellations. Verbs like 'continue' and 'keep on' focus on those stages of situations and are Activities (55). The focus expressed by Activities may be "cursive", as in 'are eating' and 'was walking' (56) or "evolutive", as in 'are drying' and 'is growing' (57).[88]

(55) a. Sen. *Phaedr.* 882: *silere **pergit***
'she persists in silence' = 'she continues being silent'
b. Cels. 2,4,3: *peiusque, quo magis se sopor interdiu noctuque **continuat***
'and it is the worse the more that somnolence continues day and night'

87. See Johanson (2000: 63).
88. See Smith (1997: 49) and Johanson (2000: 56–57, 64–65, 72). The function of *ibam* in (56b) is progressive: cf. (290) below, Section 4.1.1.

(56) a. Catull. 35,14–15: *ex eo* (tempore) *misellae / ignes interiorem* ***edunt*** *medullam*
'ever since then, poor girl, the fires have been wasting her innermost marrow'

b. Hor. *sat.* 1,9,1: ***ibam*** *forte Via Sacra*
'I was strolling by chance along the Sacred Way'

(57) a. Plaut. *Rud.* 574–575: *da mihi uestimenti aliquid aridi /* dum ***arescunt*** *mea*
'give me some dry garment to put on, while my own things are drying'

b. Cic. *nat. deor.* 2,23: *quod autem* alitur *et* **crescit** *motu quodam utitur certo et aequabili*
'but that which is nourished and grows possesses a definite and uniform motion'

Verbs like 'finish' and 'stop' have a telic and "fini-transformative" focus. If the focus is "egressive", it refers to the exit from an event; such a change might be an Accomplishment, like *transierit triginta diebus* 'crossed in 30 days' ((31b) above, Section 2.1.5), or an Achievement, like *desinite ... loqui* 'stop talking' (Caes. *civ.* 3,19,8). If the focus is "resultative" it refers to the result of a change; such a change might be an Accomplishment, as in 'they will become dry' (59a), or an Achievement, as in 'he came' and 'he found' (58).[89]

(58) Caes. *civ.* 1,10,1: *Roscius ... Capuam* **peruenit** *ibique consules Pompeiumque* inuenit
'Roscius arrived at Capua and there found the consuls and Pompeius'

As indicated by several of the examples above, the prefixes may sometimes focus on one or the other phase in the process or change.

The various prefixes change the semantic function of the verbs in different ways and often interrelate with one another, emphasizing the different kinds of focus. The prefix *ex-*, which indicates that an action is brought to its

89. See, e.g., Smith (1997: 22, 27, 31, 72), Bache (1997: 237–240), and Johanson (2000: 59–63).

end and is “fini-transformative”, often interrelates with *in-*, which indicates the entrance into it and is “initio-transformative”. The unprefixed *aresco* focuses on the internal stage (59a), whereas *inaresco* seems to indicate change + ensuing process ((52a), (59c)) and *exaresco* indicates that the action is finished ((59a), (59b)). As can be seen in the passages from Varro and Pliny, a plant which *exaruit* dies (59b), whereas a plant which merely *inaruit* very well may have a chance of survival (59c).[90]

(59) a. Plaut. *Rud.* 574–578: *da mihi uestimenti aliquid aridi /* dum ***arescunt*** *mea . . . /* :: *Tegillum eccillud, mihi unum id* aret*; id si uis, dabo / . . . / Tu istaec mihi dato:* ***exarescent*** faxo
‘give me something to wear while my clothes are drying. :: Look, here is my hood; that is the only thing which is dry that I have; if you want it, I’ll give it to you. Give me those things; I shall see to it that they get dry’

b. Varro *ling.* 5,102: *uirgultum dicitur a uiridi, id a ui quadam humoris; quae si* ***exaruit****, moritur*
‘*uirgultum* “bush” is said to be from *uiridis* “green”, and *uiridis* from a certain *uis* “power” of moisture; if this moisture has thoroughly dried out, the bush dies’

c. Plin. *nat.* 16,130: *laurus . . . cum trunco* ***inaruit****, recisa etiam laetius fruticat*
‘when the tree has became somewhat dry in the trunk, after a pruning it puts forth shoots with even greater abundance than before’

The unprefixed verbs in Table 6 are generally used to describe ongoing processes in nature, such as the changing colors at dawn (*rubesco*, *albesco*) or in somebody’s hair as the years pass (*albesco*); the verbs prefixed with *ex-* describe changes from one state to another (*exaresco*) and in several cases changes in color that reflect a change in the state of somebody’s emotions (*erubesco*, *exalbesco*); and the verbs prefixed with *in-* indicate that the change starts and takes place to some extent (*inaresco*, *irrubesco*, *inalbesco*).[91]

90. See Haverling (1996a: 172–177; 2000: 121–123).
91. See Haverling (1996a; 2000: 296–297).

Table 6. Unprefixed verbs and the prefixes *in-* and *ex-*

aresco ‘be drying’	*inaresco* ‘start becoming dry, become somewhat dry’	*exaresco* ‘become totally dry’
rubesco ‘grow red, be growing red’	*irrubesco* ‘turn reddish, somewhat red’	*erubesco* ‘turn red (in the face because of shame and embarrassment)’
albesco ‘grow white, pale, be growing white’	*inalbesco* ‘become somewhat white’	*exalbesco* ‘turn white or pale (in the face because of fear)’

The verbs prefixed with *con-* often have a completive function and indicate a change from one state to another, without emphasizing the beginning or end of that change. Such verbs often interrelate with verbs prefixed with *ad-*, which indicate the beginning of an action or situation (cf. *bellum adfectum … et … paene confectum* ‘a war that has been begun and almost finished too’ in (49b) above, Section 2.1.6) or that indicate a gradual change (as in *adsuesco* ‘get used to gradually’). The unprefixed member of such verb families often emphasizes the internal stages. A verb like *nosco* means ‘be investigating, trying to find out about’ (60a), *agnosco* means ‘get to know gradually, identify’ (60b), and *cognosco* ‘get to know’ (60c).[92]

(60) a. Plaut. *Cist.* 714–715: *qui suos Selenium parentes / facilius posset* ***noscere***
‘so that Selenium more easily may look for her parents’

b. Plaut. *Epid.* 597–598: *… quibu’ de signis* **agnoscebas***?* :: *Nullis*. :: *Qua re filiam / credidisti nostram?* :: *Seruos Epidicus dixit mihi*
‘what means of identification did you have? :: None. :: What made you believe she was our daughter? :: My servant Epidicus told me she was’

92. See Haverling (1996b: 403–408). Completives may be created in a number of different ways in the languages of the world, for instance from verbs meaning ‘finish’ (when emphasizing the end of an action): see Bybee, Perkins, and Pagliuca (1994: 57–61).

Table 7. Unprefixed verbs and the prefixes *ad-* and *con-*

nosco 'be investigating, studying, trying to find out about' (ca. 200 BCE)	*agnosco* 'get to know gradually, identify' (ca. 200 BCE)	*cognosco* 'get to know' (ca. 200 BCE)
suesco 'get used to' (Tacitus, poetic character, ca. 100 CE)	*adsuesco* 'get used to gradually' (ca. 200 BCE)	*consuesco* 'get used to' (ca. 200 BCE)

c. Plaut. *Cist.* 635–636: *nam hic crepundia insunt, quibu'cum te illa olim ad me detulit, / quae mihi dedit, parentes te ut* ***cognoscant*** *facilius*
'for in this is the rattle with which she once handed you over to me and which she gave me so that your parents may recognize you more easily'

The prefix *con-* often interrelates with *ad-*, as shown in Table 7. The unprefixed verbs usually describe ongoing activities or processes; an exception is *suesco*, which is telic and which occurs first in Tacitus, who probably uses it because of its poetic character (unprefixed verbs which are used in the sense of prefixed ones are often regarded as poetic; cf. (25d) above, Section 2.1.4). On the other hand, the verbs prefixed with *con-* indicate change from one state to another, without emphasizing the beginning or end of that change; and those with *ad-*, the gradual change that starts and goes on for some time.[93]

The lexical structure of Greek is different from that of Latin. As indicated above, statives with *-ē-* often interrelate with dynamic verbs with *-sc-*, such as *areo* 'be dry' and *aresco* 'dry, be drying' or *seneo* 'be old' and *senesco* 'grow old, be growing old' ((5)–(8) above, Section 2.1.1). In Greek, the corresponding relationship is often indicated by the opposition between a perfect like γεγήρακα 'I am old' and γηράσκω 'I grow old'; or between ἔγνωκα 'I

93. See Haverling (1996b; 2000: 277–278; 2003a: 118); on the poetic character of unprefixed words, see Haverling (2000: e.g. 143–144, 220, 229, 231). Several Roman historians used, like Tacitus, a poetic and somewhat archaic kind of language, because they considered it suitable for the august matter they were dealing with.

know' (e.g., Soph. *Oed. R.* 1117) and a *sco*-verb like γιγνώσκω 'I learn to know, perceive' (e.g., Hom. *Il.* 5,128). In Latin the use of the perfectum in a present sense is rarer than in Greek (cf. (112) below, Section 3.1.2), but a similar opposition does exist between *noui* 'know' (61a) and *nosco* 'try to identify, recognize' (61b).

(61) a. Plaut. *Men.* 504–505: *non me* ***nouisti****? … / Tuom parasitum non* ***nouisti****?*
'you don't know me? You do not know your own parasite?'
b. Ter. *Hec.* 572–573: *nam quom compressast gnata, forma in tenebris* ***nosci*** *non quitast, / neque detractum ei tum quicquamst qui posset post* ***nosci*** *qui siet*
'when my daughter was raped, she could not recognize her assailant in the darkness, and she did not snatch any possession of his at the time by which he could be identified later'

The interrelationship between the prefixes is further complicated, however, by the fact that one and the same prefix occurs in several functions. Verbs with the prefixes *in-* and *ad-* emphasize the beginning of a process, as in *inaresco* 'start becoming dry, become somewhat dry' or *afficio* 'affect, influence'; but the prefixes may also have spatial functions, such as *ad-* 'to, toward' and *in-* 'in, on' or 'into', as in *adeo* 'go to', *indormio* 'sleep on', and *ingredior* 'go into'; the verbs prefixed with, for instance, *ex-* focus on the end of a process, as in *efficio* 'make, render, bring about', but *ex-* might also mean 'out of', as in *egredior* 'go out of'; and *con-* may have a completive function, as in *conficio* 'bring to completion, accomplish' or *cognosco* 'get to know', but it might also mean 'together', as in *congredior* 'go together, meet'.[94] The system is illustrated in Table 8.

One and the same prefix therefore interrelates with different other prefixes according to their different functions. There is also more than one actional function. *Con-* has an actional function, and in *consuesco* 'get used to' or *comedo* 'eat up' it indicates that a transformation takes place; but it underlines the intensity of the action in *commoror* 'stay (on), remain, delay, wait'

94. See García-Hernández (1980, 1985, 1989, 1995) and Haverling (1994, 1996a, 1996b, 2000: e.g. 256, 277–278, 280–281, 296–297, 323).

Table 8. Spatial and actional functions of *ad-*, *in-*, *ex-*, and *con-*

		spatial	actional
ad-	'to, toward, against'	*adeo* 'go to, toward', *aggredior* 'go toward, against, assault'	*afficio* 'affect, influence', *adedo* 'eat away at, eat into, nibble', *adsuesco* 'get used to gradually'
in-	'in, toward'	*ineo* 'go into, enter', *ingredior* 'go into'	*inficio* 'infect, influence, imbue', *insuesco* 'begin getting used to'
	'in, on'	*indormio* 'sleep on'	
ex-	'out of, from'	*exeo* 'go out (of)', *egredior* 'go out of'	*efficio* 'make, render, bring about', *edisco* 'learn thoroughly'
con-	'with, together'; completion	*conuenio* 'come together', *congredior* 'go together, meet'	*conficio* 'bring to completion, accomplish', *comedo* 'eat up', *consuesco* 'get used to'

and *condormio* 'be fast asleep'; and it means 'with, together' in *congredior* 'get together, meet'; in the actional function it often interrelates with *ad-*, but when it means 'with, together' it often interrelates with *dis-*.[95] Furthermore, *con-* has somewhat different semantic functions, even in its completive function. As indicated by several of the examples above, it may focus as well on endpoints as on beginnings; verbs like *conscribo*, *conficio*, and *comedo* focus on endpoints and indicate the result of a development or action, whereas *conspicio* and *conticesco* focus on beginnings and indicate a change of state, as shown in Table 9.

Verbs with prefixes such as *per-*, *trans-*, and *pro-* often have a continuative function.[96] However, like *con-*, the prefix *per-* occurs in several semantic

95. See Haverling (2000: 251–272); cf. also H. B. Rosén (1992).
96. For the term "continuative" cf. Hopper and Traugott (2003: 85); on *per-*, *trans-*, and *pro-* see Haverling (2000: 349–360).

Table 9. The functions of *con-*

Function	Verb with *con-*	Interrelates with
Completion 1 (end)	*comedo* 'eat up'	*adedo* 'eat away, eat into, nibble, wear down'
	concalesco 'become warm'	*incalesco* 'start warming up, get somewhat warm'
Completion 2 (beginning)	*conticesco* 'start being silent stop talking'	–
	conspicio 'catch sight of'	*adspicio* 'notice with the eyes, look at, witness'
Intensity	*commoror* 'stay (on), remain, delay'	–
	condormio 'be fast asleep'	–
Spatial	*congredior* 'get together, meet'	*digredior* 'go in different directions, depart from'

functions: in the spatial function, where it means 'through, throughout', as in *percurro* 'run over or through' (62a); in a completive function, as in *perficio* 'finish' (62b); in a perdurative function, as in *peruigilo* 'stay awake throughout' (62c); and in the function of underlining the intensity or strength of an action, as in *pernego* 'deny flatly' (62d).[97] When the function of the prefix is spatial, as in *peruenio* and *perficio*, the sense is telic or momentaneous; such verbs occur with completive temporal adverbials (62a–b); but when the function of the prefix is perdurative, these verbs occur with durative temporal expressions (62c).

(62) a. Vitr. 9,1,6: *ex eo, quem circulum luna terdecies* in xii mensibus ***percurrit***, *eum sol eisdem mensibus semel* ***permetitur***
'hence the sun measures once in twelve months the circle which the moon in the same number of months runs through thirteen times'

b. Liv. 45,41,6: *quod bellum per quadriennium tres ante me consules ita gesserunt, ut semper successori traderent grauius, id ego* quindecim diebus ***perfeci***

97. See García-Hernández (1980: 178–182); cf. Johanson (2000: 55–56).

'the war that three consuls before me waged for four years in such a way that they handed it over to their successors in a worse state, that I finished in 15 days'

c. Plaut. *Amph.* 314: *nam continuas* has tris noctes ***peruigilaui***
'I have stayed awake for three nights running'

d. Plaut. *Most.* 553: *etiam fatetur de hospite?* :: *Immo* ***pernegat***
'and he confesses about the guest, eh? :: He does not. He denies it utterly'

In several cases, the semantic functions of the various prefixes overlap. The prefix *re-*, for example, generally has the sense 'back, again, anew', as in *rescribo* 'write back, answer a letter' (63a) and *recognosco* 'reconsider something previously known' (63b); but in *rescisco* 'get to know (a fact not previously suspected)', it overlaps with *con-* in *cognosco* 'get to know', as indicated by *ne uxor resciscat* (64a) and *ne uxor cognoscat* (64b) in Plautus.[98]

(63) a. Cic. *Att.* 16,16A,2: *probauit causam,* **rescripsit** *Attico aequa eum postulare*
'he approved of the case and wrote back to Atticus that his request was reasonable'

b. Cic. *Verr.* I 15: *neque … uidetur haec multitudo …* cognoscere *ex me causam uoluisse, sed ea quae scit mecum* ***recognoscere***
'and the purpose of the audience that has gathered to attend this trial is not, I conceive, to learn the facts of the case from me, but to join me in reviewing the facts that it knows already'

(64) a. Plaut. *Asin.* 743: *ne uxor* ***resciscat*** *metuit*
'he is afraid of his wife finding out'

b. Plaut. *Men.* 429: *ne uxor* ***cognoscat*** *te habere*
'so that my wife will not find out that you have it on you'

The most important prefixes thus have a function connected with the preposition to which it is related as well as one or more actional functions. In some cases the functions of different prefixes overlap. In other words, the system is rather complicated, and it is perhaps not astonishing that it did not

98. See Haverling (1996b: 409–410; 2000: 361–362, 365).

survive but was replaced by a different one. Language change takes place when there is an overlap in the function of two or more expressions or when one and the same expression has several different functions.[99]

2.2 The development in later Latin

2.2.1 ±dynamic

The stative suffix *-ē-* disappears in Late Vulgar Latin and Romance, where the long *ē* and short *ĭ* merge as [e].[100] Thus we move from a system where a state is expressed by a suffix to one where it is often expressed by an adjective + *esse* (*calet* 'it is warm' > *calidum est* 'it is warm').[101] Verbs like *calere* are still in function in literary Late Latin but tend to be rare in the less elegant texts.[102] In the sense 'is old', Late Latin has formulations like *est senex* and not the old stative verb *senet* found in Early Latin ((65); (5) above, Section 2.1.1).

(65) a. IV *reg.* 4,14: *filium enim non habet et uir eius **senex est***
'well, she has no son, and her husband is old'
b. *Hist. Aug.* 24,12,7: *sed non hoc in me aetatis est: **senex sum**, ad exemplum equitare non possum*
'but I am not of the right age; I am old, for example, I cannot ride'

99. See, e.g., Hopper and Traugott (2003: 102–103, 116–118), Aitchison (2001: 176–178), and Traugott and Dasher (2002: 11–16).
100. See, e.g., Väänänen (1981 §§ 42–45).
101. See C. Lehmann (1995); on the use of stative verbs instead of adjectives + copula in active languages, see W. P. Lehmann (2002: 29, 36, 79–81).
102. On the translation of Hippocr. *aphor.* 4,48 (ἢ τὰ μὲν ἔξω **ψυχρὰ** ᾖ, τὰ δὲ ἔνδον **καίηται** 'if the surface of the body is cold the interior is hot') by Celsus in the 1st century CE (2,6,7: *exterior pars **friget**, interior sic **calet***) and by an anonymous translator around 500 CE (Hippoc. *aphor.* 4,48: *si quidem foris **frigidi sint**, intus autem **ardeant***), see Haverling (2007: 166–167); Stotz (1998–2000, 2 § 109.1) mentions just one new such verb in Medieval Latin (*blauere* 'to be blue').

Table 10. The distribution of some stative verbs in different periods

		BTL		*CLCLT–5*				
		before 200 CE	after 200 CE	before 200 CE	ca. 200–500 CE	ca. 501–735 CE	Middle Ages	*e-MGH*
aegret	'is ill'	2	5	2	–	–	–	–
albet	'is white'	11	1	11	5	1	10	4
alget	'is cold'	11	7	11	7	6	6	8
anet	'is old'	1	2	1	1	–	–	–
aret	'is dry'	29	13	28	12	1	19	5
calet	'is hot'	46	18	46	25	14	36	28
friget	'is cold'	9	16	9	15	5	26	5
languet	'is weak'	24	6	24	8	8	80	9
latet	'is hidden'	180	62	180	437	174	614	132
madet	'is wet'	18	3	18	9	1	6	9
rubet	'is red'	45	7	45	19	11	71	23
senet	'is old'	3	4	3	–	–	–	–
silet	'is silent'	43	18	43	34	13	77	11
tacet	'is silent'	61	17	61	237	61	204	34
tepet	'is tepid'	11	2	10	–	–	8	1

A look at the text corpora in the *BTL*, the *Library of Christian Latin Texts* (*CLCTL–5*), and the *Monumenta Germaniae Historica* (*e-MGH*) indicates that stative verbs like *calet*, *friget*, etc., become less frequent in Late Antiquity, that they are even rarer in the transitional period between Late Antiquity and the early Middle Ages, and that they become more frequent again in the later Middle Ages. Some stative verbs, such as *latet* 'is hiding' and *tacet* 'is silent, does not speak', remain common in all periods. This development is illustrated in Table 10.

In Early and Classical Latin, the *sco*-suffix generally has a dynamic function. Late Latin, however, has a growing number of *sco*-verbs which do not seem to have a dynamic sense. In the fourth century CE there are examples of the use of *obatresco* in the sense 'be dark' (66a) and *lippesco* in the

sense 'have red eyes' (66b), as is shown by a passage with the expression *Lia lippis erat oculis* 'Leah's eyes were red' (Vulg. *gen.* 29,17). In (66c) the durative temporal adverbial 'for 5 months' shows that *delitesco* has become synonymous to *lateo* and means 'be hiding' (in Classical Latin it means 'hide oneself, vanish').[103]

(66) a. Firm. *math.* 1 praef. 4: *lacus … qui semper crassitudine lurida sordidus liuentibus spumis* ***obatrescit***
'the lake which is always dark and squalid with sallow density and livid foam'

b. Hier. *in Soph.* 3,19 lines 581–582: *et cum Lia* ***lippescit***, *et non amatur a Iacob et Rachel succedente, neglegitur*
'and as Lia has red eyes and is not loved by Jacob and Rachel succeeds her, she is neglected'

c. Amm. 27,12,11: mensibus quinque ***delitescentes***
'hiding for five months'

The use of old *sco*-verbs like *delitesco* in the new function 'be hiding' seems to be a feature of the literary language. In the language of everyday conversation, many of these verbs were probably disappearing; this is indicated by the development of *conticesco* and its cognates in Late Latin (cf. Table 11 below, Section 2.2.3).[104] On the other hand, the *sco*-suffix now appears in new verbs where it was not needed before, such as *fulgesco* 'shine brightly, glitter' (67a) and *foetesco* 'stink' (67b) from *fulgo* or *fulgeo* 'shine brightly, glitter' and *foeteo* 'stink' respectively.[105]

(67) a. Firm. *math.* 1,10,14: *tuque, Luna, quae … augusta radiatione* ***fulgescis***
'and you, Moon, who are shining with mighty splendor'

103. See Haverling (2000: 53, 65); cf. Stotz (1998–2000, 2 § 109.2).

104. Some of the Late Latin authors who use *conticeso* and *conticui* with some frequency also have a fair share of the Late Latin examples of *delitescere*, which in Classical Latin has the dynamic function 'hide oneself, vanish' but which in Late Latin is synonymous with the unprefixed, unsuffixed verb *latere* 'be hiding': Ammianus Marcellinus (infectum 7, perfectum 1), Ambrose (inf. 5), Augustine (inf. 6), Jerome (inf. 4), Ennodius (pf. 1), Gregory the Great (inf. 4): see Haverling (2005a).

105. See Haverling (2000: 169–174).

b. Isid. *orig.* 20,3,1: (aqua) ***fetescit*** *enim uetusta*
'for water stinks when it is old (and not fresh)'

As a result of this development, the *sco*-suffix was reduced to an element in the conjugation of certain verbs in the Romance languages, where it is restricted to certain forms (e.g., It. *finire*/*finisco* and Fr. *finir*/*finissais*).[106]

2.2.2 Agency, voice, and ±dynamic

Another change hits the opposition between transitive and intransitive verbs. A considerable number of previously transitive verbs now occur in an intransitive sense. In some cases the opposition between transitive and intransitive was indicated by the *sco*-suffix (*augeo*/*augesco*, *inuetero*/*inueterasco*). In later Latin, however, there is a tendency to use the unsuffixed and previously transitive verb in an intransitive sense. This development can be followed in (68), where Early and Classical Latin have the contrast between a transitive *inuetero* and an intransitive *inueterasco* (68a); the unprefixed *ueterasco* and the intransitive *inuetero* occur in the fourth century CE (68b).[107]

(68) a. 1st and 2nd c. BCE:
inuetero
'allow to become old, make old' (e.g., Cic. *nat. deor.* 2,5)
inueterasco
'grow old, age, improve with age, mature' (e.g., Ter. *Hec.* 12)
b. 4th c. CE:
ueterasco
'grow old, long-established' (e.g., Vulg. *Hebr.* 1,11)
inuetero
'grow old, age, improve with age, mature' (e.g., Vulg. *Is.* 65,22)

The dynamic function of the *sco*-suffix is gradually blurred, and several of the *sco*-verbs are replaced by parasynthetic verbs with the prefix *in-* and

106. See Sittl (1884: 514–516), Meyer-Lübke (1899 § 593), Väänänen (1981 § 316), Allen (1980: 89–110, 115–118), and Zamboni (1982–1983, 1983).
107. See Haverling (1996a: 178–179; 2000: 153–154, 182–183, 302, 312–314); cf. Feltenius (1977: e.g. 96–97, 103, 109) and Stotz (1998–2000, 2 § 128.8; 4 § 75).

the suffix *-are*. In Classical Latin there are the unprefixed verbs *crassesco* and *pinguesco* in the sense 'become fatter' (69a), but in literary Late Latin the prefixed verbs *incrassesco* and *impinguesco* occur in that sense (69b), and there are also the transitive *incrasso* and *impinguo* 'make fatter', which are new but formed according to an old pattern (69c); the intransitive *incrasso* and *impinguo* 'become fat' (69d) occur in less literary Late Latin texts.[108]

(69) a. 1st c. BCE – 1st c. CE:
crassesco
'grow thicker, thicken' (e.g., Colum. 8,9,2)
pinguesco
'grow fatter' (e.g., Lucr. 5,899)
b. 4th c. CE:
incrassesco
'grow fatter' (Rufin. *Orig. in psalm.* 38 *hom.* 2,8)
impinguesco
'grow thick, fat' (Hier. *in Is.* 16,58,11)
c. 3rd–4th c. CE:
incrasso
'make fat(ter)' (e.g., Tert. *ieiun.* 6,3)
impinguo
'make fat' (e.g., Vet. Lat. *Sirach.* 35,8)
d. 3rd–4th c. CE:
incrasso
'become fat, grow fat(ter)' (Vet. Lat. *Is.* 6,10 ap. Cypr. *testim.* 1,3 *incrassaui* 'became fat, grew fat')
impinguo 'become fat, grow fat' (Apic. 8,7,5)

A look at the collections of texts in the *BTL*, *CLCLT-5*, and *e-MGH* shows that of the old *sco*-verbs *pinguesco* is still rather frequent in Late Latin, whereas *crassesco* is not; and that the transitive *impinguo* and *incrasso* are quite frequent, whereas the new *sco*-verbs with *in-* and the intransitive *impinguo* and *incrasso* occur only occasionally. In Late Latin, the old verb *pinguesco* is

108. See Haverling (2000: 182–183, 305–306, 311–314; 2003a: 123–125; 2003b: 168–169); on the parasynthetic verbs see, e.g., Crocco Galèas and Iacobini (1993).

more common in literary writers and texts than in less literary ones, but the authors who use *pinguesco* with some frequency also have a fair number of examples of the transitive verb *impinguo*.[109] A considerable number of the transitive instances are passives which replace the old *sco*-verbs (70). In some cases, different manuscripts contradict each other regarding such verbs. The manuscripts of the *Old Commentary* on the Late Latin translation of the Hippocratic *Aphorisms* differ in this respect; some have the passive forms of the transitive verbs (71a), whereas others have the active and intransitive ones (71b). The manuscripts which have the intransitive verbs in this passage provide less elegant readings in other passages, too.[110]

(70) Ambr. *in psalm.* 38,34,2: *tabescit autem anima, quando ...* ***incrassatur***, *cum*
'the spirit is growing less strong when ... it becomes more bold when'

(71) a. Hippocr. *aphor.* 1,3 comm.; mss. Ba, Vc2, Mc and G: *incrassantur ... impinguantur*
b. Hippocr. *aphor.* 1,3 comm.; mss. Re, Ei, P5 and P4: *incrassant .... impinguant*

The intransitive use of verbs like *impinguare* is rare in the Late Latin texts we have but seems to have been a common feature in the less educated language. When better editions of the Late Latin medical texts are available and when these texts are incorporated into electronic text corpora, we will probably get a better picture of the linguistic situation in this respect in the last centuries before the collapse of the Roman school. It is not improbable that the increasing use of transitive verbs like *incrassare* in the passive voice actually hides an increased use of intransitive verbs formed in the same way in the everyday language of the average person.[111]

The relationship between actionality and voice has already been mentioned (e.g., (17) above, Section 2.1.2). This connection is also of importance in the development in Late Latin, where "initio-transformative" expressions

109. See Haverling (2005a).
110. See Haverling (2003b: 168–169).
111. See Haverling (2005c, 2007).

like *proficiscor*, which means both 'set out, make a journey' and 'be on one's way', are sometimes replaced by reflexive expressions with *uadere* 'go' and the accusative (72a) or the dative of a reflexive pronoun (72b); this corresponds to Romance formulations like Fr. *s'en aller* and It. *andarsene*.[112]

(72) a. *Itin. Eger.* 25,7: *recipit se episcopus et* ***uadent se*** *unusquisque ad ospitium suum, ut se resumant*
'the bishop withdrew and everyone went away to his lodgings to rest'

b. Sort. Sangall. 7,1: ***uade tibi***, *fatue*
'get away, stupid'

The reflexive expressions also replace old *sco*-verbs (cf. It. *riscaldarsi* and Fr. *se chauffer* with Lat. *calesco* 'warm up' (23a) above, Section 2.1.4; and It. *addormentarsi* and Fr. *s'endormir* with Lat. *condormisco* 'fall asleep' (24) above, Section 2.1.4).

2.2.3 States and change

Early and Classical Latin have the unprefixed, unsuffixed verb *taceo* 'be silent' and *tacui* 'have been/was silent' and the prefixed verb *conticesco* 'stop talking' and *conticui* '(have) stopped talking' ((27)–(28) above, Section 2.1.4); in poetry there is one example of the prefixed, unsuffixed *conticeo* 'stop talking' ((26a) above, Section 2.1.4). But from around 200 CE, some odd uses of old prefixed verbs are encountered. From the fourth century CE there are examples where *tacui* definitely means 'stopped talking' (73a); in the same period, *cum tacuisset* occurs in the sense 'as he had stopped talking' (73b). In the third and fourth centuries CE, *conticui* occurs in the stative sense 'have been/was silent' (75a), and there are indications that *conticesco* and *taceo* were now regarded as synonyms (75b); and the previously rare and

112. See Löfstedt (1911: 140–143, 167–168; 1933: 387–396), Hofmann & Szantyr (1965 § 164) and Stotz (1998–2000, 4 § 76); cf. Vincent (1988a: 58) and Johanson (2000: 62–63, 67); also García-Hernández (1998).

poetic verb *conticeo* now occurs in prose (76).[113] In the early seventh century, a grammarian mentions the verb *tacesco* (74).[114] In other words there are some examples of a hypercorrect use of the prefixed forms in conservative authors who try to write as people did a few centuries earlier; in the late fourth century CE the conservative pagan senator Symmachus uses the expression *hucusque conticui* in the sense 'have been silent so far' (75a), which corresponds to the formulation *tacui adhuc* in a passage of Plautus from the early second century BCE ((27a) above, Section 2.1.4).[115] Sometimes *conticui* is still used in its normal sense 'stopped talking', as in Ammianus and Augustine (77), who, however, also use *tacui* in the dynamic sense (73).

(73) a. 4th c. CE:
Vulg. *act.* 15,13: *postquam* ***tacuerunt***, *respondit Jacobus*
'when they had stopped talking, J. answered'
Amm. 16,6,3: *Verissimus ilico* ***tacuit***
'Verissimus immediately stopped talking'
b. 4th–5th c. AD:
Aug. *ord.* 1,6,16: *cum* ***tacuisset*** *Trygetius*
'when Trygetius had stopped talking'

(74) 7th c. CE:
Virg. gramm. *epist.* 3,9: *ut* ***tacesco*** *tacui*

(75) a. 3rd and 4th c. CE:
Vlp. *dig.* 48,19,6: *qui tam diu* ***conticuerunt***
'who for so long time have kept silent about'
Symm. *epist.* 5,89,1: *hucusque* ***conticui***
'I have kept silent so far'

113. The hypercorrect use of *conticui* in the conservative and learned archaist Symmachus has a parallel in the hypercorrect use of *delituere* 'have been hiding' in the 5th-century archaist Claudianus Mamertus (*Anim.* 2,9 p. 137 line 14).

114. See Haverling (2000: 166, 224–225, 265–266); the fact that such a form as *tacesco* in the sense 'stop talking' was not possible in earlier Latin was not always fully understood: cf., e.g., Kuryłowicz (1964: 107).

115. See Haverling (2000: 224–225; cf. also 1994: 49–50); cf. Hopper and Traugott (2003: 137–138) and Traugott and Dasher (2002: 11–16). This effect is frequently met with when stativity and perfect or perfectivity are combined: see Bybee, Perkins and Pagliuca (1994: 75–80, 92–95) and Smith (1997: 70).

b. 3rd and 4th c. CE:
Lact. *inst.* 4,27,14: *in perpetuum* ***conticescet***
'will keep silent for ever'
Mar. Victorin. *defin.* p. 37,3: *conticescere est tacere*
'*conticescere* means the same as *tacere*'

(76) 4th c. CE:
Hier. *in psalm.* 20: *impia synagoga* ***conticeat***
'the wicked synagogue should be silent'

(77) a. Amm. 22,16,17: *nec harmonica* ***conticuit***
'harmony is not reduced to silence'
b. Aug. *conf.* 9,11: *cumque hanc sententiam … explicasset,* ***conticuit***
'when he had explained this view, he stopped talking'

Several of the new unprefixed verbs, such as *tacesco* (74), occur only in the grammarians; and some grammarians, such as Priscian in the sixth century, regard the verb *conticeo* 'stop talking', which was very rare and poetic in the earlier periods, as the normal form corresponding to the perfect *conticui* (Prisc. *gramm*. III p. 469). The grammarians and especially Priscian mention several verbs formed along these lines, including *deliteo* 'hide' and *exareo* 'dry out'. Some verbs of this type also occur in the literary texts from the later period.[116]

Before about 200 CE, the infectum and perfectum forms of the verbs *taceo* and *conticesco* are relatively frequent in all sorts of texts and there is only one example of the poetic verb *conticeo*. But in Late Latin, *conticesco* and *conticui* become less common, although there are several new examples of *conticeo* and a couple of instances of *tacesco* in the *BTL* and in *CLCLT–5*, vol. 1, as indicated in Table 11.[117]

The 2 examples of *tacesco* and 12 of the examples of *conticeo* occur in grammarians (often referring to Verg. *Aen*. 2,1: *Conticuere omnes* 'they all stopped talking'), as do 10 of the examples of *conticesco* and 17 of *conticui*

116. See Haverling (2000: e.g. 224–225, 265–266, 311, 339, 457).
117. In the texts from the earlier centuries, the form *conticisc-* is found more often than the form *conticesc-*: see Keller (1992: 335–348).

Table 11. Taceo, *conticesco*, and *conticeo* in Latin before and after ca. 200 CE

	BTL		*CLCLT–5*				
	to 200 CE	from 200 CE	to ca. 200 CE	ca. 200–500 CE	ca. 501–735 CE	Middle Ages	*e-MGH*
taceo	829	236	829	2122	719	2014	621
tacui	124	64	124	729	222	473	107
tacesco	–	2	–	–	–	–	–
conticesco	23	8	23	59	46	66	24
conticui	68	47	68	65	23	55	40
conticeo	1	12	1	4	5	13	6

from the later periods.[118] The other Late Latin examples of *conticesco*, *conticui*, and *conticeo* are generally found in authors who write a rather refined form of literary Late Latin (e.g., Jerome and his translations of the Bible; Ambrose, Augustine, Ammianus, Cassiodorus, and Gregory the Great). This pattern is found in the distribution of other old prefixed *sco*-verbs: one example is *delitesco* 'be hiding' (CLat. 'vanish, disappear'), of which the grammarians have quite a few of the Late Latin instances and of which a substantial number of the other examples occur in Ammianus, Ambrose, Augustine, and Jerome (cf. (66c) above, Section 2.2.1).

As we have seen, there is a change in the relationship between the unprefixed perfect *tacui* and the prefixed *conticui* from Early to Late Latin. In Late Latin, the unprefixed perfect could be used in both the dynamic and the stative sense: it could mean 'stopped talking' as well as 'was silent'. This development affects not only related verbal pairs like *taceo*/*tacui* and *conticesco*/*conticui* but also the verbal system at large, as illustrated by the development of *habui* 'I have had, I had'. In the ingressive sense 'he fathered/she bore a son', Classical Latin has such expressions as *filium genuit*, whereas *filium habuit* is stative and means 'she was the mother/he was the father of

118. See Haverling (2005a); cf. Stotz (1998–2000, 2 § 176).

a son' (cf. (349)–(350) below, Section 4.1.5). But French and Italian have phrases like *elle eut un enfant* and *ebbe un bambino* in the sense 'she bore a child', which shows that *habui* acquired a dynamic function in Vulgar Latin (cf. (372) below, Section 4.2.1). In my view, these changes also affect the relationship between the perfect and imperfect tenses of stative verbs: I deal with this development in the section on viewpoint ((341)–(343) below, Section 4.1.5, and (368)–(370) below, Section 4.2.1).[119]

2.2.4 ±telic and ±momentaneous

In Late Latin, the refined actional system of Classical Latin becomes blurred and is gradually replaced by another system. The original semantic difference between unprefixed, atelic verbs and prefixed, telic ones is weakened; as a result, many old verbs become superfluous. In Classical Latin, the expression for 'eat' is *edo*; and in the sense 'eat up' there is *comedo* ((33) above, Section 2.1.5); in Late Latin, however, this opposition is blurred and the prefixed *comedo* may occur in the atelic sense (78).[120]

(78) Vulg. *gen.* 2,16–17: (Deus) *praecepitque ei dicens: ex omni ligno paradisi* ***comede****. de ligno autem scientiae boni et mali ne* ***comedas****. in quocumque enim die* ***comederis*** *ex eo morte morieris*
'and the Lord God commanded the man, saying, "You may freely **eat of** every tree of the garden; but **of** the tree of the knowledge of good and evil you shall not **eat**, for in the day that you **eat of** it you shall die"'

119. See Haverling (2000: 241–246). The fact that these changes exist in Latin and that the Latin system in this respect differs from the Romance has not always been taken into consideration (cf. Hewson 1997a: 327).

120. See Haverling (1999, 2000, 2003a); cf. Hopper and Traugott (2003: 122–124). *Comedo* is the verb preferred in the more literary texts, while the other "new" verb in the sense 'eat', *manduco*, seems to have lower status: see *ThLL* 5.2 col. 100 lines 10–42. There are, for example, 45 examples of *edere*, over 540 of *comedere*, and ca. 170 of *manducare* in the Vulgate; *comedere* is the verb most frequently found in the parts which were translated by Jerome himself, and we have reason to believe that he preferred it because it was considered to be the "better" word; see Löfstedt (1959: 40–41).

There are even cases where the unprefixed, previously atelic verb is used in a telic sense and vice versa. In Classical Latin there is an opposition between unprefixed verbs indicating an atelic Activity, such as *suadeo* 'try to persuade' (e.g., Plaut. *Stich.* 608), and prefixed verbs used in a telic sense, such as *persuadeo* 'persuade' (e.g., Sall. *Iug.* 46,4). In Late Latin, however, the prefixed *persuadeo* may have the sense 'try to persuade' (79a) and the unprefixed *suadeo* the sense 'persuade' (79b).[121] In this case the winner is *persuadeo*, but nevertheless *suadeo* is still rather frequent in Late Latin, where it is often found in the telic sense.

(79) a. Vulg. *act.* 21,14: *et cum ei* ***suadere*** *non possemus quieuimus dicentes Domini uoluntas fiat*
(μὴ πειθομένου δὲ αὐτοῦ ἡσυχάσαμεν εἰπόντες, τοῦ κυρίου τὸ θέλημα γινέσθω)
'and when he would not be persuaded, we ceased, saying, the will of the Lord be done'

b. Vulg. *Ruth* 1,18: *uidens ergo Noemi quod obstinato Ruth animo decreuisset secum pergere aduersari noluit nec ultra ad suos reditum* ***persuadere***
'when Naomi saw that Ruth was steadfastly minded to go with her, she no longer wished to oppose her decision and try to persuade her to return to her family'

The loss of the opposition between *panem edo* 'I eat bread' and *panem comedo* 'I eat up the bread' is likely to be one of the elements which triggered the development of definite and indefinite articles and the introduction of partitive expressions in Romance. In many languages the opposition between an atelic expression like (a) 'I eat bread' and a telic one like (b) 'I eat up the bread' is expressed by a definite article, underlining the telicity in (b), or by a partitive expression, indicating the atelicity of (a).[122] There are certainly traces of the development toward the Romance system of definite

121. See Haverling (2000: 207; 2001: 362–363).
122. See e.g. Hopper (1979), Comrie (1989: 127) and Croft (1990: 177); Abraham (1997: 36, 47) mentions that, e.g., Old High German normally uses the partitive genitive with the verb *drincan* 'drink'; cf. also Philippi (1997: 79–80).

and indefinite articles in Late Latin. The correct interpretation of many single instances has, however, been disputed, and the most authoritative scholars who have dealt with the matter agree that there was no systematic use of such devices in Latin.[123] There seems in fact to be no Latin example of an article clearly expressing the telicity once expressed by the prefix: there seems to be no example of *panem comedo* 'I eat up a/the bread' being replaced by for instance **panem unum comedo* or **panem illum comedo*. What do exist, however, are partitive expressions with the prepositions *de*, *ex*, or *ab* which underline the atelicity formerly indicated by the unprefixed verb (as in (78)).[124] In (80) *bibo* 'drink (some) of' appears with a partitive expression *de uino*, and in (81a) there is a partitive expression *de cadauere* with the prefixed verb *comedo* meaning 'eat (some) of'; by contrast, the latter verb with an object in the accusative means 'eat up' in (81b).

(80) Vulg. *Ier.* 51,8: de uino *eius* ***biberunt*** *gentes et ideo commotae sunt*
'the nations have drunk of her wine; therefore the nations are mad'

(81) a. Vulg. *I reg.* 13,28: *non* ***comedit*** *leo* de cadauere *nec laesit asinum*
'the lion had not eaten of the carcass, nor torn the ass'

b. Vulg. *Matth.* 12,4: *et* panes *propositionis* ***comedit*** *quos non licebat ei edere*
'he did eat the shewbread, which was not lawful for him to eat'

However, in (80), where the Vulgate has *de uino*, the Septuagint too has a prepositional phrase, ἀπὸ τοῦ οἴνου; and the same problems affects (82). In the Latin there seem to be two atelic expressions, one with an object in the accusative (*fructum eius non edit* 'does not eat of its fruit') and one with a partitive expression (*de lacte … manducat* 'does not eat of the milk'); but

123. See, e.g., Löfstedt (1942: 358–382), Hofmann & Szantyr (1965 § 106), and Väänänen (1981 § 275). The literature on this problem is vast, and the views on when genuine use of definite and indefinite articles has emerged in Latin vary a great deal; Selig (1992: 19–24) gives an overview of the earlier discussion.

124. In early Germanic, e.g., Gothic, there is an interaction between the actional markers on the verbs and the cases: atelic verbs are combined with the partitive genitive and telic verbs with the accusative; this system was eventually replaced by the use of articles: cf. Abraham (1997), Philippi (1997), and Leiss (2000).

the Greek original has a definite article in the first case (‘does not eat the fruit’) and a prepositional phrase in the second.

(82) Vulg. *1 Cor.* 9,7: *quis plantat uineam et* fructum *eius non* ***edit****? quis pascit gregem et* de lacte *gregis non* ***manducat****?*
I Cor. 9,7: τίς φυτεύει ἀμπελῶνα καὶ **τὸν καρπὸν** αὐτοῦ οὐκ **ἐσθίει**; ἢ τίς ποιμαίνει ποίμνην καὶ **ἐκ τοῦ γάλακτος** τῆς ποίμνης οὐκ **ἐσθίει**;
‘who plants a vineyard without eating any of its fruit? Who tends a flock without getting some of the milk?’

The trouble with these and almost all the other examples found in Late Latin is that they are found in texts translated from Greek, or at least possibly influenced by translations from Greek, or, in a couple of cases, written by Greeks writing on medicine in Latin. There are also a few examples in Christian authors referring to the Bible.[125] In other words, these expressions were possible in Late Latin, but there is yet no systematic use of them as a device to indicate atelicity.

The semantic changes that hit the verbal prefixes are reflected in the constellations in which the prefixed verbs occur in Late Latin. One example is the use of *cognosco* in the sense ‘know’ in a clause introduced by the conjunction *dum*, which here has a causal function and means ‘since’, in Jerome (83a). The Latin *sco*-verbs found in constellations with expressions which have the sense ‘to stop’, such as *desino* and *cesso*, or ‘to continue’, such as *pergo*, are often unprefixed. However, in the later periods more prefixed verbs are used in such constructions, as with *cognosco* in the early fifth century in a passage of Augustine, who uses this verb in the sense ‘study’ and not ‘get to know’ (83b).[126]

125. Cf. the examples with *de*, *ab*, and *ex* in *ThLL* s.vv. *bibo* and *poto* ‘drink’ and *edo*, *comedo*, and *manduco* ‘eat (up/of)’; only a few are from the 3rd century CE, and most are from the 4th, 5th, and 6th centuries.
126. See Haverling (2000: 77–78, 108–111).

(83) a. Hier. *epist.* 10,3,2: *ut,* dum *scismatici hominis uenena **cognoscimus**, libentius sancti martyris Cypriani bibamus antidotum*
‘so that we, since we know the schismatic fellow’s poison, rather drink the remedy provided by the holy martyr Cyprian’

b. Aug. *in psalm.* 68 *serm.* 2,8: *quia cum* cessauerint *superna **cognoscere**, necesse est ut de inferioribus cogitent*
‘because as they have stopped studying the supreme things, they think by necessity of the lower ones’

In the earlier periods, the verbs with the *sco*-suffix generally have a dynamic sense, as in *aresco* ‘become drier, grow more and more dry’, but in Late Latin such verbs often indicate a State. A few previously impossible unprefixed *sco*-verbs now appear in the sense of the prefixed verb; compare *mutesco* ‘become mute, stop talking’ in an edict from 399 CE quoted in the *Codex Theodosianus* (84b) and *obmutesco* in that sense in Cicero (84a).[127]

(84) a. Cic. *Mil.* 98: *‘De me’ inquit ‘semper populus Romanus, semper omnes gentes loquentur, nulla umquam **obmutescet** uetustas . . . ’*
“‘of me”, he says, “shall the people of Rome and all nations ever speak, of me shall no far-off age ever cease to make mention”’

b. *Cod. Theod.* 9,40,17 (399 CE): *ut eiusdem uniuersis actibus antiquatis omnia **mutescant** tempora*
‘so that, when all the administrative measures taken by him are rejected, there will be no further talk about this (scandal)’

The semantic bleaching which hits the *sco*-verbs would later also affect the iterative and intensive verbs in *-(i)tare* and *-(i)ssare*: thus *cantare* ‘sing often, repeatedly, or intensively’ tends to replace the older *canere* ‘sing’ in Late Latin (cf. (16) above, Section 2.1.2).[128]

127. See Haverling (2000: 53, 65, 191, 205–206); cf. Väänänen (1981 § 316).
128. See Rohlfs (1949–1954, 3 § 1155; cf. § 1167); and Löfstedt (1959: 28–29).

2.2.5 Focus and lexicon

As a result of these changes, the semantic function expressed by several old verbs is more connected with their traditional use than with the originally actional character of their formation. In Classical Latin, *erubesco* describes a change from one color to another in somebody's face and is used of people blushing for shame and embarassment (85a), whereas *irrubuit* means 'became somewhat red, stained with red' (85b); but in Late Latin *erubesco* usually means 'be ashamed' (86a), and to indicate that somebody actually turns red in the face, a fifth-century author uses a form of *irrubesco* (86b). The semantic function of *erubesco* is no longer connected with the original grammatical function of the verb but with the traditional lexical meaning. But, as we have already observed in the development from *crassesco* 'become fat(ter)' to *incrassesco*, *incrassari*, and *incrassare*, the prefix *in-* is still productive in an ingressive and dynamic function in Late Latin ((68)–(71) above, Section 2.2.2).[129]

(85) a. Cic. *Q. Rosc.* 8: ***erubescit***, *quid respondeat nescit*
'he blushes, he does not know what to answer'
b. Stat. *Theb.* 6,230–231: *nondum ira calet, nec sanguine ferrum / **irrubuit***
'wrath is not yet hot and the sword has not yet been stained with red blood'

(86) a. Lact. *ira* 7,1: *dum percontari obuios **erubescit***
'while he is ashamed to ask those whom he meets'

129. See Haverling (1996a: 177–179; 2000: 304); cf. Hopper and Traugott (2003: 76): "Meaning loss or 'bleaching' typically occurs, but even so, older meanings may still continue to constrain newer, 'emptier' ones". Several critical problems are connected with this development. In a couple of cases the prefix *in-* appears in passages which lack the prefix in the direct tradition. Against this background I am inclined to doubt the example of *insenesco* (instead of the expected *senesco*) in the sense 'start growing old, wane' quoted from Cicero by Nonius (Cic. *Ac. frg.* 6 in Non. p. 121,29–122,1: ... *Lunae ... et nascentis et **inseniscentis***). This use of *insenesco* is suspiciously similar to Late Latin usage, and we therefore have reason to doubt that Cicero actually used this prefixed form: cf. Haverling (2000: 306).

b. Sidon. *epist.* 8,6,6: *cum quodam prologo pudoris uultum modeste demissus* ***inrubuit***
'with what I may call a prologue of modesty, he bashfully lowered his eyes and *blushed*'

In Late Latin, the various members of the verb family *nosco* are often confused with one another, as indicated for instance in (87), where *cognosco* and *agnosco* occur in the function of *noui* 'I know'; in the Greek the same verb, γινώσκω, is used in all these cases. But in some respects the old functions are retained: *agnosco* is, for instance in the *Codex Theodosianus*, often a technical term for the assumption of legal duties or the acknowledgement of a specific legal situation or transaction (88a), which resembles the earlier usage. In the sense 'recognize, identify', however, *agnosco* and *cognosco* are often replaced by *recognosco* (88b), which in Classical Latin had the sense 'reconsider something previously known' (cf. (63b) above, Section 2.1.7), or by the new verbs *renosco* 'identify, recognize' (88c) and *reagnosco* 'recognize, acknowledge' (88d).[130]

(87) Vulg. *Ioh.* 10,14–15: *Ego sum pastor bonus: et* ***cognosco*** *meas, et* ***cognoscunt*** *me meae. / Sicut* ***nouit*** *me Pater, et ego* ***agnosco*** *Patrem; et animam meam pono pro ouibus*
NT *Ioh.* 10,14–15: Ἐγώ εἰμι ὁ ποιμὴν ὁ καλός, καὶ **γινώσκω** τὰ ἐμὰ καὶ **γινώσκουσί** με τὰ ἐμά, καθὼς **γινώσκει** με ὁ πατὴρ κἀγὼ **γινώσκω** τὸν πατέρα, καὶ τὴν ψυχήν μου τίθημι ὑπὲρ τῶν προβάτων
'I am the good shepherd, and *know* my sheep, and *am known* of mine. As the Father *knows* me, even so *know* I the Father: and I lay down my life for the sheep'

(88) a. *Cod. Theod.* 4,8,8: *praedictam multam* ***agnoscat***
'he shall acknowledge his duty to pay the fine'

b. Tert. *idol.* 2,5: *dum illam* (idololatriam) *non solum in manifestis* ***recognoscimus***
'as long as we recognize it (i.e. idolatry) not only when it is in the open'

130. See Haverling (1996b: 411–412; 2000: 88, 282–283, 368).

c. 4th c. CE:
renosco
'identify, recognize' (e.g., Ps. Cypr. *tract.* 17)

d. 6th c. CE:
reagnosco
'recognize, acknowledge' (Ps. Fulg. Rusp. *serm.* 29 med.)

The semantic changes that hit the verbal prefixes are also reflected in the constellations in which the prefixed verbs occur in Late Latin. The Latin *sco*-verbs found in constellations with expressions which have the sense 'to stop', such as *desino* and *cesso*, or 'to continue', such as *pergo*, are often unprefixed. However, in the later periods more prefixed verbs are used in such constructions, for example in the early fifth century in Augustine, who uses *cognosco* in the sense 'study' and not 'get to know'; another example is Jerome's use of *cognosco* in the sense 'know' in a clause introduced by the conjunction *dum*, which here has a causal function and means 'since' ((83) above, Section 2.2.4). Lexical changes are thus accompanied by grammatical changes.

As a result of the confusion in the system of verbal affixes, a considerable number of new verbs are created. *Ad-* is very productive in transitive as well as intransitive verbs in Late Latin, where such verbs often replace earlier verbs without the prefix; Plautus has the expression *garrire nugas* but in Martianus Capella we read *nugulas aggarrire* (89a); when Quintilian talks about abbreviating a text he uses the unprefixed *breuio*, but about three hundred years later, Vegetius has the prefixed *abbreuio* in the same sense (89b).[131]

(89) a. *garrio* 'chatter' – *aggarrio* 'chatter'
ca. 200 BCE: Plaut. *Aul.* 830: *soleo hercle ego garrire nugas*
'by Hercules, sir, I am all the time running on foolish-like'
5th c. CE: Mart. Cap. 1,2: *nugulas ineptas* ***aggarrire***
'chatter silly things'

b. *breuio* 'abbreviate' – *abbreuio* 'abbreviate'
1st c. CE: Quint. *inst.* 1,9,2: *et breuiare quaedam*
'and abbreviate some of it'

131. See Haverling (1999: 242–243; 2000: 285–286); cf. Thomas (1938a: 86, 91).

4th c. CE: Veg. *mil.* 3 praef.: *quae ... adbreuiare*
'to abbreviate that'

The original function of the actional *ad-* was to emphasize the entrance into an action and graduality; this is lost in Late Latin, but the prefix retains the capacity to indicate dynamicity, and in this new function it is productive in Late Latin and Romance. Late Latin has a growing number of verbs with *ad-* which do not differ semantically from earlier verbs without the prefix. *Ad-* may even replace the *sco*-suffix: Early and Classical Latin have *uesperascit* 'it is approaching evening' and *aduesperascit* 'it starts to become evening', and Late Latin has the verb *aduesperat* in the sense 'it becomes evening' (90a); here is the parallel between the expression *uesparescente caelo* (90b) and *aduesperante die* in the sense 'in the evening' (90c).[132]

(90) a. *uesperascit* 'it is approaching evening' (2nd c. BCE)
aduesperascit 'it starts to become evening' (2nd c. BCE)
aduesperat 'it gets toward evening' (ca. 400 CE)

b. Nep. *Pel.* 2,5: *ut* ***uesperascente*** *caelo Thebas possent peruenire* (1st c. BCE)
'in order to be able to reach Thebes at nightfall'

c. Cassian. *conl.* 3,2,1: *ad cellam eius iam die* ***aduesperante*** *peruenimus* (ca. 400 CE)
'we came to his hut while the day was already turning into evening'

The new verbs with *in-* and *ad-* replace not only old unprefixed *sco*-verbs but also prefixed *sco*-verbs. Early and Classical Latin use *condormisco* and *obdormisco* in the sense 'fall asleep' and *indormio* in the sense 'sleep on, sleep during' (91a). But in Late Latin there are also *indormisco* and *indormio*

132. See Haverling (1999: 243–244; 2000: 284; 2003a: 124–125). A critical problem involving *ad-* is found in the Late Latin translation of the Hippocratic *Aphorisms*. Classical Latin has the verb *dentire* 'get teeth', but several manuscripts of this translation have readings which seem to indicate that there was a verb *addentire* in Late Latin (*aphor.* 3,25 ed.: *ad dentes uenerint*; mss.: *addentauerint / ad dentia uenerint / ad dentes peruenerint*). Manuscripts containing medical texts from the early Middle Ages have other examples of the verb *addentire*: cf. Haverling (2000: 286–287; 2003b: 163–165).

(91b) as well as *addormisco* and *addormio* in the sense 'fall asleep' (91c); in this case French has chosen the form in *in-* (*s'endormir*) and Standard Italian that with *ad-* (*addormentarsi*).[133]

(91) a. *dormio* 'be asleep' (2nd c. BCE)
condormisco 'fall asleep' (2nd c. BCE)
obdormisco 'fall asleep' (1st c. BCE)
indormio 'sleep on, sleep during' (1st c. BCE)
b. *indormisco* 'fall asleep' (4th c. CE)
indormio 'fall asleep' (4th c. CE)
c. *addormisco* 'fall asleep' (6th c. CE)
addormio 'fall asleep' (5th c. CE)

In Late Latin – especially in the literary language – the words look very much the same as before, but in several cases their semantic functions have changed. Due to these changes, new kinds of word formation are introduced, as well as new ways of using some of the old words. These changes are presumably connected with other changes in the language, for instance in the tense system and in the development of articles in Romance.

3. Tense

The Latin verbal system differs from classical Proto-Indo-European in having lost the opposition between the old aorist and the old perfect known to us from Classical Greek. The Latin verbal system is thus divided into two categories, the *infectum* and the *perfectum*: the fundamental function of the *perfectum* is

133. See Haverling (1999: 243–245; 2000: 284, 304); see also García-Hernández (1980: e.g. 213–215; 1985; 1989; 1995); cf. also Lorenzo Lorenzo (1976: 20–24, 42). According to the manuscripts, the verb *addormisco* occurs in one passage in Suetonius (early 2nd c. CE) in the sense 'fall asleep' (Suet. *Claud.* 8: *quotiens post cibum* ***addormisceret*** 'whenever he fell asleep after dinner'); however, in the other passages this author uses *obdormisco* in this sense (Suet. *Claud.* 33,2 and Suet. *Vesp.* 4,4). Since there is no obvious semantic difference between them I find it likely that this example of *addormisco* may be the work of some scribe: see Haverling (2000: 284).

to indicate that an action is finished, whereas the *infectum* describes it as continuing. Another important structural difference between Latin and Greek has to do with the fact that Latin is less rich in participles than Greek. This means that Latin often uses a subordinate clause where Greek uses a participle. In this respect Latin syntax is more complicated than Greek, and it is probably also for this reason that Latin developed a more refined system to express various temporal relations in subordinate clauses than Greek.[134]

Classical Latin puts rather strong emphasis on the notion of tense. The usefulness of the notion of viewpoint, or as it is often called "aspect", in a description of Latin, and the correct definition of the Latin perfect, has, however, been a matter of considerable dispute. From the beginning, this discussion has taken place against the background of the system found in Classical Greek. In Greek the finite and infinite forms expressing present, past, and future actions were formed from the three aspectual stems, whereas Latin had a system of only two aspectual stems, the infectum and the perfectum. Varro's description (*ling*. 9,96–101), from the first century BCE, seems to emphasize its function as a present perfect, whereas Priscian (*gramm*. III pp. 450–453), some six hundred years later, gives more weight to its function as a past tense.[135]

The Latin tense system is fully developed only in the indicative. In the subjunctive and imperative there are fewer tense forms: two in the imperative, indicating present and future; and there is no synthetic subjunctive form indicating only future, but many of the forms expressing the simple future are old subjunctives, and the future perfect resembles the perfect subjunctive in all forms but the 1st singular.[136] The possibility exists, however, of indicating future in the subjunctive with a periphrastic form (*uocaturus sim*; (175)–(180) below, Section 3.2.3).

134. See Hofmann & Szantyr (1965 §§ 167, 168, 176, 178) and Pinkster (1995: 287–290, 298–301, 307–310); cf. Binnick (1991: 86–89, 95–96). In this respect Greek is more archaic than Latin: see W. P. Lehmann (2002: 106–124).

135. For overviews of this discussion, see, e.g., Pinkster (1983), Mellet (1988: 8–14), Haverling (2000: 9–13), and Oldsjö (2001: 15–25). Meillet (1897) reestablished Varro's division into infectum and perfectum; cf., e.g., Ernout & Thomas (1953 § 236); also Harris (1971: 63; 1978: 134).

136. See Leumann (1977 §§ 419–428, 432, 442–446) and Baldi (2002: 396–406).

Classical Latin is particularly sensitive with regard to the use of tense and underlines the relative sequence of events with more precision than many other languages. Where English may have two past tense forms in, for instance, *whenever he fell, he got up again*, Latin has the absolute-relative past tense in the subordinate clause (*cum ceciderat, surgebat* 'whenever he had fallen, he got up again'). The apparently clear and logical system met with in Classical Latin is, however, not totally consistent, and an important problem in the description of the system, especially in its earlier stages, concerns the extent to which we may interpret some uses of the forms in the perfectum as residues of an older aspectual system similar to that of Greek. In indirect speech, this sensitivity to relative and absolute-relative time is particularly clear. A form expressing relative tense has no temporal reference of its own but depends on that of another expression or clause. Classical Latin normally has the "accusative with the infinitive" instead of a subordinate clause after *uerba dicendi* "verbs of saying": in such a case the tense of this construction remains the same, independent of the tense of the verb to which it is subordinated. However, when there is a subordinate clause in the subjunctive, as for instance in an indirect question following a *uerbum dicendi*, the tense changes with the tense of the verb in the main clause: this *consecutio temporum* "sequence of tenses" occurs in indirect commands and questions, adverbial clauses of the purpose type, and subordinate clauses with indirect discourse (cf. Sections 3.1.4, 3.2.3, 3.3.4).[137]

Past versus nonpast is the basic division in many languages and, it seems, in Proto-Indo-European. The Greek and Latin verbal paradigms, however, have synthetic forms expressing a third category, the future. As in several other languages, some of the forms expressing future in Latin derive from modal expressions.[138] In Greek, the finite and infinite forms expressing present, past, and future actions were formed from the three aspectual stems of classical Proto-Indo-European and there were active and passive partici-

137. See, e.g., Pinkster (1995: 286) and Binnick (1991: 84–89, 95–96); for a discussion of some apparent contradictions to these rules, see Grassi (1966: 3–90). The Italic languages have a similar system: see, e.g., Wallace (2004: 855); cf. Clackson (2004: 807) and Clackson and Horrocks (2007: 58–60).

138. See, e.g., Comrie (1985: 45–48). In some languages the opposition is present vs. future or, rather, realis vs. irrealis: cf. Bhat (1999: 131–133).

ples in the present and future, and active, passive, and medial participles in the aorist and perfect (cf. Table 1 above, Section 1.2).

The problematic form in the Latin system is the perfect. In Classical Latin the perfect is used in most cases where some other languages, such as Classical Greek, would use a form referred to with that name, but also – and more often – where Greek and other languages would use a past tense.[139] When the Latin perfect is used as a perfect, it indicates "current relevance" – that is, that an action which has been performed in the past is still relevant in the present moment. In such cases, it may be found with temporal adverbials locating the situation in the present; it then corresponds to the Greek perfect (ἀφῖγμαι) and the English perfect *I have come* (92a). But when it is used as a general past tense, the Latin perfect may occur with temporal adverbials locating the event in a moment before "reference time"; it then corresponds to the Greek aorist (ἀφικόμην) and the English past tense *I came* (92b).[140] When the Latin perfect indicates current relevance, the present tense is used in the following final clause (93a), but when the perfect is used as a past tense, the imperfect appears in such cases (93b).

(92) a. Plaut. *Merc.* 939: nunc ***perueni*** *Chalcidem*
'now I have reached Chalcis'

139. See Kühner & Stegmann (1955 § 33), Hofmann & Szantyr (1965 §§ 168a, 178), Leumann (1977 §§ 432–441), Meiser (2003), Baldi (2002: 367), and Pinkster (1995: 298–301); cf. Gildersleeve & Lodge (1895 §§ 175.5, 236); Smyth (1956 §§ 1840, 1923–1944, 1946–1947); Ernout & Thomas (1953 §§ 251.II.B.1, 236, 243, 244); for an overview of the different functions of the perfect in Classical Latin, see, e.g., Haverling (2002). Meillet (1897) described the Latin perfect tense as "completed" present action, that is, as expressing current relevance. Serbat (1976–1977) protested and observed that the perfect tense is in fact almost always used as a past tense. His own description, however, neglects the fact that the perfect tense is not only a past tense but also a perfect tense expressing current relevance; it has therefore been criticized by among others Vairel (1979), Poirier (1979) and Pinkster (1983: 287–288).

140. See Comrie (1978: 52) and Bybee, Perkins, and Pagliuca (1994: 60–61); cf. Smyth (1956 § 1945). On differences between languages as regards the length of the period including the moment 'now', see Lindstedt (2000: 370–371, 373) and Dahl and Hedin (2000: 393–396). Klein (2000) discusses the relationship between the past tense and perfect tense functions of the German perfect.

b. Cic. *epist.* 11,5,1: *Romam autem* ***ueni*** a. d. V Id. Dec.
'I came to Rome on the 9th of December'

(93) a. Plaut. *Merc.* 669: ***reueni***, *ut illum* persequar *qui me fugit*
'I have come back to pursue the man who flees me'

b. Cic. *div. in Caec.* 2: *cuncti ad me publice saepe* ***uenerunt***, *ut suarum fortunarum omnium causam defensionemque* susciperem
'they all, repeatedly and officially, approached me, to undertake the cause of defending their common fortunes'

The fact that the old functions of the Proto-Indo-European perfect and aorist have merged into one tense indicates, of course, that in several respects their different functions were blurred.[141] In some respects, however, they were still distinguishable in Classical Latin and for that reason I find it proper to describe the Latin perfect as a tense with somewhat different functions.[142]

The historical connection between the Greek and the Latin perfect becomes particularly clear in those cases in which Latin uses the perfect in a present sense. A few verbs in both languages, such as Greek οἶδα 'I know' and ἔοικε 'it is like, likely, fitting' and Latin *memini* 'I remember' and *odi* 'I hate', occur only in the perfect.[143] A few of the perfect forms used in this manner also have corresponding present forms, such as Greek τέθνηκα 'I am dead', μέμνημαι 'I remember', ἔγνωκα 'I know', and πεφόβημαι 'I am filled with alarm' and Latin *noui* 'I know'. The perfect, the future perfect, and the pluperfect of such verbs correspond to the present, simple future, and imperfect in the texts, as in the forms of *odi* 'I hate' (94).[144]

141. The development from perfect to past tense is quite common among the languages of the world: on Ancient Greek see, e.g., Horrocks (1997: 118–119); on Old Slavic see Tommola (2000: 458–461); on Indo-Iranian see Kümmel (2000: 65–82); and on Romance see Squartini and Bertinetto (2000: 404–419).

142. Cf. Comrie (1985: 26).

143. There is a long discussion of the original function of the perfect in Proto-Indo-European; for some recent contributions see, e.g., di Giovine (1990, 1996; for a discussion of this work see Harðarson 2001), Kümmel (2000), and Jasanoff (2003: 30–63); on the perfect as a development of the stative, see W. P. Lehmann (2002: 78–80).

144. See, e.g., Kühner & Stegmann (1955 § 33.3), Hofmann & Szantyr (1965 § 178a); cf. Sihler (1995 §§ 410, 509).

(94) a. Catull. 85,1: ***odi*** *et* amo*: cur id faciam fortasse requiris?*
'I hate and I love: why I do so, perhaps you ask?'
b. Ov. *am.* 3,11b,35: ***odero***, *si* potero*; si non, inuitus* amabo
'I will hate if I have strength; if not I shall love unwillingly'
c. Sen. *dial.* 9,1,2: *nec bona fide liberatum me eis quae* timebam *et* ***oderam*** *nec rursus obnoxium*
'nor free from those things that I feared and hated nor once again exposed to them'

In this section I divide the material into the semantic tense categories present, future, and past rather than follow the functions of the forms in the verbal paradigm. For that reason the Latin perfect has been split between several subsections (3.1.2, 3.1.3, 3.2.4, 3.3.1, and 3.3.4).

3.1 The Present

3.1.1 The present tense

The Latin present tense locates an action or situation at the moment identified as the present moment. This action or situation may coincide exactly with the present moment, as in (95a), where the adverb *nunc* means 'right now, at this very moment'. Often, however, a much longer stretch of time is referred to, as in (95b), where *hodie* means not 'today' but rather 'nowadays, in our time'. Even without such adverbials, however, the present indicative itself may refer to the moment regarded as 'now' (96a), but it also appears in references without temporal location, such as proverbs or very general statements (96b).[145]

(95) a. Plaut. *Amph.* 120: *nam meus pater intus* nunc ***est***
'my father is now inside there'
b. Cic. *rep.* 2,4: *ubi* hodie ***est*** *haec urbs*
'where this city now stands'

145. See Kühner & Stegmann (1955 § 31.1) and Hofmann & Szantyr (1965 § 170).

(96) a. Cic. *Verr.* II 4,15: *omnibus iste ceteris Siculis odio* ***est****, ab his solis* ***amatur***
'he is hated by everybody else in Sicily, only by these is he loved'
b. Caes. *Gall.* 3,18,6: *libenter homines id quod* ***uolunt credunt***
'people often believe what they want to believe'

The present tense refers to an action which is going on and is not yet finished, and it may therefore be encountered in cases where the attempt rather than the finished (telic) action is described ((97); this resembles the alleged "conative" use of the imperfect tense in (352)–(353) below, Section 4.1.6).[146] When the present indicative occurs with *postquam*, the function is to indicate that a stative or a dynamic and atelic situation is still lasting (98a) or that a telic action is repeated several times in the past and is still going on in the present ((98b); there is a corresponding use in the imperfect in (324) below, Section 4.1.3).[147]

(97) Plaut. *Capt.* 232–233: *quod sibi uolunt, / dum id* ***impetrant****, boni sunt*
'as long as they are trying to get what they want for themselves, they are good'

(98) a. Plaut. *Men.* 234: *hic annus sextust,* postquam *ei rei operam* ***damus***
'this is the 6th year since we started dedicating us to that'
b. Plaut. *Truc.* 682: postquam *in urbem crebro* ***uenio****, dicax sum factus*
'since I started coming more often to the city, I have become witty'

146. In Greek too, there is sometimes a "conative" use of the present tense (cf. Isaeus 1,26: καὶ πείθουσιν ὑμᾶς ἐναντία καὶ τοῖς νόμοις καὶ τῷ δικαίῳ καὶ τῇ τοῦ τετελευτηκότος γνώμῃ ψηφίσασθαι 'they are trying to persuade you to vote contrary to the laws'): cf. Moore (1934: 72).
147. Cf. Kühner & Stegmann (1955 §§ 31.4 & 8, 207.7b); Hofmann & Szantyr (1965 § 170 Zus. a).

As opposed to several modern European languages, Latin does not use the perfect but the present to indicate "anterior continuing" with stative or with dynamic and atelic expressions. This phenomenon occurs in expressions with such meanings as 'have lived here for many years (and am still living there)' (99a) or 'have been tormented for several years (and are still being tormented)' (99b). This usage is found in Classical Greek, too.[148]

(99) a. Cic. *Verr.* II 4,38: *is Lilybaei* multos iam annos ***habitat***
'he has now been living at Lilybaeum for many years'

b. Cic. *Tusc.* 2,45: *qui* complures annos *doloribus podagrae* ***crucientur*** *maximis*
'who for many years have been tormented by the most painful gout'

With durative adverbials, including the moment referred to as 'now', Latin thus uses the present tense; and when the Latin perfect occurs with durative temporal adverbials, the reference is always to a past situation which does not last any longer (as indicated by (118a) below, Section 3.1.2). It is worth noting that Latin uses an adverbial indicating duration and nothing else in this case: in Swedish or French, for instance, an adverb like Sw. *sedan* or Fr. *depuis* 'since' is needed to use the present tense with adverbials expressing duration.[149] In the past tenses, there is a corresponding opposition between durative temporal adverbials combined with the perfect tense and indicating that an action was going on for a certain amount of time, and such adverbials combined with the imperfect tense indicating "anterior continuing" in the past ((307)–(308) below, Section 4.1.3); in the latter case, Scandinavian and English would normally use the pluperfect.[150]

148. Cf., e.g., Aristoph. *Plut.* 437: σφῷν ξυνοικῶ πόλλ' ἔτη 'I have been your mate for many a year!': see, e.g., Smyth (1956 § 1885) and cf., e.g., Hofmann & Szantyr (1965 § 170 Zus. a); and cf. Comrie (1978: 60) and Bybee, Perkins, and Pagliuca (1994: 62). Most – but not all! – Slavic languages use the present tense in such cases: see Tommola (2000: 447).

149. That there is such a difference between Latin and French has sometimes not been emphasized enough: cf., e.g., Hewson (1997b: 96–97).

150. See Haverling (2001: 359–360).

In some cases, however, the present tense refers to a moment other than the present. In narratives there is a frequent use of the historical present, where the present tense replaces the perfect (100a); in general, however, a narration usually starts with a past tense form or with some other reference to the pastness of the situation. Temporal clauses introduced by a number of conjunctions, for instance *ubi* 'when', usually take the perfect ((100a); (323) below, Section 4.1.3) or the historical present indicative (100b); the pluperfect is used when a definite interval is mentioned ((239) below, Section 3.3.2). The verbs *inquam* (100c) and *aio* (100d) 'say', which only have present tense forms, frequently refer to past actions. The conventions of literary style in Classical Antiquity are rather free in the use of such devices, and sometimes there is a striking mixture of tenses in the texts (101a–b).[151]

(100) a. Ter. *Phorm.* 862–867: *puer ad me* ***adcurrit*** *. . . , / . . .* ***respicio***, ***rogo*** */ . . . ; / . . . / . . . hoc* ubi *ego* **audiui**, *ad fores / . . . ire* perrexi, *accessi, astitit*
'the slave boy ran up to me, I turned round and asked . . . ; When I heard that, I continued toward the doors, I reached them, stood still'

b. Liv. 4,56,8: *quae* ubi . . . ***nuntiantur*** *Romam, senatus extemplo . . . dictatorem dici iussit*
'when these tidings were carried to Rome, the senate forthwith ordered a dictator to be appointed'

c. Cic. *div.* 2,127: *'aliquot somnia uera',* ***inquit*** *Ennius, 'sed omnis non est necesse'*
'"some dreams are true", says Ennius, "but not necessarily all"'

d. Plaut. *Most.* 1087–1088: *quid* ***ait****?* :: *Seruos* pollicitust *dare / suos mihi omnis quaestioni*
'what did he say? :: He agreed to give me all his slaves for cross examination'

151. See Kühner & Stegmann (1955 § 31.2, 3, 5 & 6), Moore (1934: 106), and Hofmann & Szantyr (1965 § 171); cf. Dressler (1968: 118–123), Pinkster (1995: 290–292, 310–312), and Oldsjö (2001: e.g. 339); cf. also Quint. *inst.* 9,3,11: *praesens pro praeterito positum est*.

(101) a. Cic. *Verr.* II 1,66: *et simul seruis suis Rubrius ut ianuam* claud-erent *et ipsi ad foris* adsisterent ***imperat***
'at the same moment Rubrius told his slaves to shut up the front door and stand on guard at the entrance'

b. Liv. 28,31,3: *Mago … nuntios Carthaginem* ***mittit*** *… qui …* ***hortentur*** *ut auxilia* mitterent
'Mago sent messengers to Carthage to urge them to send reinforcements'

In the poetic language, the present tense of verbs sometimes refers to actions which are past but have a permanent result in the present, as in *me eripis* 'you bring me away from (i.e., save me from)' (102a) and *Phoebo patre gignor* 'I am born from Phoebus (i.e., I am a son of Phoebus)' (102b).[152]

(102) a. Verg. *Aen.* 2,664: *hoc erat, alma parens, quod me per tela, per ignis /* ***eripis****?*
'it is for this that you have saved me, dear mother, through weapons and fire?'

b. Sen. *Ag.* 295: *auctore Phoebo* **gignor***; haud generis pudet*
'Phoebus was the source of my begetting; my birth shames me not'

In some cases, however, the present tense refers to the future. The reference is then to the immediate or expected future, and quite a few of the examples are, like (103a), with a verb meaning 'to go';[153] (103b) is an example of the present tense with *cras* 'tomorrow' in a reference to a feast taking place that day. The present is sometimes found in conditional clauses referring to the future (104).[154]

(103) a. Plaut. *Merc.* 962–963: *ad patrem ibo, ut matris iram sibi esse sedatam sciat. /* iam ***redeo***
'I shall go and find my father and let him know that my mother has cooled off and is not angry at him. I already return'

152. See Hofmann & Szantyr (1965 § 170 Zus. c).
153. See Bybee, Perkins, and Pagliuca (1994: 250–251).
154. See Kühner & Stegmann (1955 § 31.7), Hofmann & Szantyr (1965 § 172), and Pinkster (1995: 291-292); cf. Sihler (1995 §§ 407, 417).

b. Plaut. *Pseud.* 60: cras *ea* (Dionysia) *quidem* ***sunt***
'the Dionysian festival is tomorrow'

(104) a. Liv. 36,28,6: *itaque ni propere* ***fit*** *quod impero, uinciri uos iam iubebo*
'unless my order is immediately executed, I shall at once order you to be put in chains'

b. Plaut. *Rud.* 168: *saluae* ***sunt***, *si illos fluctus deuitauerint*
'they are safe, if they avoid those waves'

Sometimes Latin has verbs in the passive voice where Modern Scandinavian or English, for instance, would use a resultative expression. This is often the case with expressions like *cingitur* 'is surrounded' (105a), to which there is a corresponding use of the active (105b). In some cases the passive present tense (106a) seems to have the same function as a periphrastic form (106b).[155]

(105) a. Cic. *Verr.* II 5,96: *non portu illud oppidum* ***clauditur***, *sed urbe portus ipse* ***cingitur*** *et* ***continetur***
'that town is not enclosed by its harbor, but the harbor itself is surrounded and encircled by the city'

b. Caes. *Gall.* 1,38,5: *flumen Dubis ut circino circumductum paene totum oppidum* ***cingit***
'the river Doubs, with a circuit that might have been traced by compasses, surrounds almost the whole town'

(106) a. Quint. *inst.* 11,3,144: *fascias quibus crura* ***uestiuntur***
'the ribbons with which the legs are covered'

b. Caes. *Gall.* 5,14,2: *sed lacte et carne uiuunt pellibusque* ***sunt uestiti***
'they live on milk and flesh and clothe themselves in skins'

The passive voice of the perfect often expresses current relevance, but sometimes also resultativity (cf. (126)–(128) below, Section 3.1.3).[156]

155. Cf. Kühner & Stegmann (1955 § 31.5 Anm. 2). On the relationship between passive forms like *cingitur* and reflexive forms like *se cingit*, see Flobert (1975: 387–390); cf. Kiss (1982: 21).

156. See Squartini and Bertinetto (2000: 404–419); cf. Tommola (2000: 462–463).

As opposed to some other languages, Classical Latin uses the indicative of expressions with a modal content, such as *debeo* 'ought to, be obliged to' (107a) or *longum est* 'it would take too long' (107b). In conditional clauses, the present indicative simply states the elements in question (108a). The present subjunctive in hypothetical conditional clauses represents the matter as still in suspense (108b); the imperfect subjunctive, however, is frequently used to indicate counterfactuality in the present ((108c); cf. (234) below, Section 3.3.1).[157]

(107) a. Ov. *ars* 1,285: *Myrrha patrem, sed non qua filia* ***debet****, amauit*
'Myrrha loved her father, but not as a daughter should'

b. Cic. *nat. deor.* 2,159: ***longum est*** *mulorum persequi utilitates et asinorum*
'it would be tedious to rehearse the useful qualities of asses and mules'

(108) a. Cic. *inv.* 1,46: *si spiritum* ***ducit****,* ***uiuit***
'if he is drawing (his) breath (breathing), he is living'

b. Cic. *inv.* 1,31,53: *si uicinus tuus equum meliorem* ***habeas*** *quam te, tuumne equum* ***malis*** *an illius?*
'if your neighbor were to have a better horse than yours, would you prefer your horse or his?'

c. Cic. *Rab. perd.* 19: *libenter* ***confiterer****, si uere* ***possem*** *… sed quoniam id facere non* possum
'I would willingly avow it, if I could do it truthfully, but since I cannot do it'

The subjunctive of the present tense refers to the present moment in a general sense as well as to future actions. It refers to the present in expressions indicating concession (109a) and result (109b); and it often refers to a future action in expressions indicating will (110a), potentiality (110b), and purpose (110c), and in prohibitions (110d).[158]

157. See Kühner & Stegmann (1955 §§ 44.2, 213, 214.1 & 2) and Hofmann & Szantyr (1965 §§ 183.b, 360, 361).

158. See Kühner & Stegmann (1955 §§ 45, 46, 47, 48) and Hofmann & Szantyr (1965 §§ 184, 185.I & IV, 186); cf. Pinkster (1995: 250–252, 302–303).

(109) a. Ov. *Pont.* 3,4,79: *ut **desint** uires, tamen est laudanda uoluntas*
'the strength may be missing, but the good intention is nevertheless worthy of praise'

b. Cic. *Lael.* 29: *quodsi tanta uis probitatis est, ut eam … in hoste etiam **diligamus***
'but if the force of integrity is so great, that we love it even in an enemy'

(110) a. Cic. *Tusc.* 5,118: *aut **bibat** … aut **abeat***
'he shall either drink or go away'

b. Cic. *Sest.* 100: *hanc ego uiam, iudices, si … asperam … **negem**, **mentiar***
'if I were to deny that this road is hard, judges, I would be lying'

c. Plaut. *Merc.* 669: reueni, *ut illum **persequar** qui me fugit*
'I have come back to pursue the man who flees me'

d. Plaut. *Aul.* 173–174: *uerba* ne ***facias***, *soror. / scio quid dictura es*
'now, do not say anything, sister! I know what you are about to say'

The difference between the present and the perfect subjunctive in expressions like *ne facias* and *ne feceris* 'do not do it' has sometimes been said to be that between a more general exhortation expressed by the present subjunctive and one that points to a particular situation expressed by the perfect subjunctive ((189)–(190) below, Section 3.2.4). This resembles the difference between the two forms of the imperative, which in Early Latin seems to be that the present imperative looks forward to immediate fulfilment (111a), whereas the future imperative, formed with the particle *-tōd*, looks forward to contingent fulfilment (111b); this becomes particularly clear in passages in which both imperatives occur together ((111c); cf. (182) below, Section 3.2.4).[159]

159. See Kühner & Stegmann (1955 §§ 50, 51 & 52) and Hofmann & Szantyr (1965 §§ 187, 188); cf. Pinkster (1995: 256–262, 303).

(111) a. Plaut. *Bacch.* 857: *quid nunc ego faciam?* :: ***Iube*** *sis me exsolui cito*
'what shall I do now? :: Give the order, I pray, that I am to be released quickly'
b. Plaut. *Curc.* 526: *dabuntur:* cras *peti* ***iubeto***
'the payment will be given: tell them to ask for it tomorrow'
c. Plaut. *Merc.* 787–788: *Syra,* ***i***, ***rogato*** *meum patrem uerbis meis, ut ueniat ad me simul tecum*
'Syra! Go to my father and ask him in my name to come to me with you at once'

There is, however, a partial overlap between the present and the perfect subjunctive in prohibitions and in expressions indicating potentiality ((186)–(188) below, Section 3.2.4).

3.1.2 Current relevance

The connection between the Greek and the Latin perfect becomes particularly clear in those cases in which Latin uses the perfect in a present sense and especially in the verbs which occur only in the perfect ((94) above, Section 3). A few perfectum forms which have corresponding infectum forms are sometimes used in this manner. One such case is *noui*, the perfect of *nosco* 'try to get to know', which is frequently found in the sense 'know' (112a), but which also occurs in the sense 'have made the acquaintance of' (112b). This ancient usage gradually disappears in both languages; later Latin often uses the verb *cognosco*, which means 'get to know' in Classical Latin, in the sense 'know' (cf. (87) above, Section 2.2.5).[160]

(112) a. Plaut. *Men.* 504–505: *non me* ***nouisti****? … / tuom parasitum non* ***nouisti****?*
'you don't know me? You do not know your own parasite?'

160. See e.g. Haverling (1996b: 410–411; 2000: 58, 282–283); cf. Duhoux (2000: 419–420, 424–426).

b. Plaut. *Men.* 748–749: ***noui*** *cum Calcha simul: / eodem die illum uidi quo te ante hunc diem*
'I knew him when I knew Calchas: I saw him on the same day I first saw you'

The Latin perfect corresponds to the Classical Greek perfect in expressing "current relevance" – that is, in indicating that a past situation is relevant from a present point of view. In this function, the Latin perfect is found with temporal adverbials including the moment referred to as 'now'.[161] The perfect *perueni* means 'have come to, reached' and corresponds to a perfect in Greek (ἀφῖγμαι); when this is the function of a perfect, the present is used in the following final clause (cf. (92)–(93) above, Section 3). Verb phrases expressing current relevance also combine with adverbs like 'already', as in a phrase like 'has set out already' (113), or with 'not yet', as in 'has not come yet' (114).[162]

(113) Plaut. *Mil.* 1428: *Philocomasium* iam ***profecta est****?*
'has Philocomasium set out already?'

(114) Aur. Fronto *epist. ad M. Caes.* 1,6,4: *uenit tandem? Si* nondum ***uenit****, at saltem adpropinquat?*
'has he come yet? If he has not yet come, is he, at all events, near?'

A subcategory of the notion of current relevance is "experientiality", which indicates that "a given situation has held at least once during some time in the past leading up to the present". Such expressions are *I have met somebody* or *I have been to Paris*, which imply that I am, at least to some extent, familiar with somebody or with Paris. Latin uses the perfect in such cases (115).[163] The Latin use of the perfect *noui* in the sense 'have made the acquaintance of' as well as in the sense 'know' (112a) has this function, too.

161. See Comrie (1978: 52) and Bybee, Perkins, and Pagliuca (1994: 61–68); cf. Smyth (1956 § 1945). Languages differ as regards the length of the moment 'now': see Lindstedt (2000: 370, 373) and Dahl and Hedin (2000: 393–396); cf. also Klein (2000) on the past tense and perfect tense functions of the German perfect.
162. See Johanson (2000: 106); cf. Dahl (2000: 802, exx. 27–32); Tommola (2000: 467–468).
163. See Bybee, Perkins, and Pagliuca (1994 : 62, 95–104) and Lindstedt (2000: 369–370); cf. Johanson (2000: 118).

(115) Cic. *Planc.* 84: *Rhodi enim ... ego non* ***fui*** *... sed* ***fui*** *...* bis *in Bithynia*
'for I have never been to Rhodes but I have been twice in Bithynia'

In (115) we have the adverb *bis* 'twice'. As opposed to the imperfect, the perfect takes such adverbs; and it does so when used in the perfect as well as when used in the past tense function. Greek uses such adverbs with the perfect as well as with the aorist (cf. (294)–(297) below, Section 4.1.2).

As a result of its strong tendency to indicate the succession of events, Latin uses the perfect and not the present in an objective conditional clause like (116), where one situation precedes another. In a few cases, however, the perfect may be used in a reference to the result, as in (117); of the verb *perdo*, the present usually means 'cause ruin or destruction' in Early and Classical Latin, whereas the perfect is used in the resultative sense 'lose, be deprived of'.[164]

(116) Cic. *Tusc.* 2,52: *si pes* ***condoluit***, *si dens ... ferre non* possumus
'if a foot or a tooth is hit by pain, we cannot bear it'

(117) Plaut. *Asin.* 918–919: *ni* impetro, */ regem* ***perdidi***
'if I do not get that, I lose the king'

The tendency to indicate the relative sequence of events is discussed further in the sections on the absolute-relative tenses (3.2.2, 3.3.2).

As opposed to modern Scandinavian and English, Ancient Greek and Latin use not the perfect but the present to indicate "anterior continuing" when durative temporal adverbials are combined with stative or with dynamic and atelic expressions, as, for instance, in an expression meaning 'have lived here for many years' (cf. (99) above, Section 3.1.1). When the Latin perfect occurs with durative temporal adverbials, the reference is always to a past situation which does not last any longer, as indicated by (118a), where there are such adverbials with both the perfect and the present, and by (118b), where the perfect occurs in a temporal clause following a main clause in which such

164. See Kühner & Stegmann (1955 § 33.4); cf. the examples in *OLD* s.v. *perdo* 1 and 3.

an adverbial occurs with the present tense.[165] Compare the use of the present tense in these cases with durative temporal adverbials with the use of the perfect with an inclusive adverbial like *semper* 'always' in (119).

(118) a. Cic. *fin.* 5,8: *et Staseam Neapolitanum* multos annos ***habueris*** *apud te et* complures iam menses *Athenis haec ipsa te ex Antiocho* ***uideamus*** *exquirere*
'you had Staseas from Naples in your household for many years, and we know you have now been studying this very subject under Antiochus for several months in Athens'

b. Plaut. *Most.* 470: septem menses ***sunt***, quom *in hasce aedis pedem nemo intro* ***tetulit***
'nobody has set foot in this house for the last seven months'

(119) a. Cic. *Verr.* II 1,2: *est idem Verres qui* ***fuit*** semper
'Verres is the same as he always was'

b. Cic. *Brut.* 332: *ex urbe ea quae domus* **est** semper ***habita*** *doctrinae*
'from that city which always has been regarded as the home of learning'

A case like (119a) makes it quite clear that the present is not included in the perfect *fuit*, although the situation described is still going on at Reference time (cf. *uixerunt* 'they have lived' in (220)–(221) below, Section 3.3.1).[166]

3.1.3 Resultativity

A "resultative" expression indicates that a state exists as a result of a past action: 'is gone' is resultative because it tells us something about the present state of affairs (somebody is not around), whereas 'has gone' simply indicates current relevance, namely, what has occurred and is still relevant (and the person in question may in fact have returned as well). Resultativity is found

165. See Kühner & Stegmann (1955 §§ 31.4, 33.5 Anm. 2, 203 Anm. 2) and Hofmann & Szantyr (1965 § 170 Zus. a); cf., e.g., Smyth (1956 § 1885); and cf. Comrie (1978: 60) and Bybee, Perkins, and Pagliuca (1994: 62).

166. Cf. Dahl (2000: 804, ex. 50); Squartini and Bertinetto (2000: 408).

with certain telic verbs that have a well-defined result-state as a part of their inherent meaning. An example is the Greek perfect ἀπελήλυθε 'is gone' in (120).[167] Only resultatives combine with adverbs of unlimited duration such as 'still' or 'as before'. The Latin perfect, however, does not normally express resultativity and in expressions like 'she is still gone', Latin does not use the perfect but replaces it with expressions in the present (121).[168]

(120) Hom. *Od.* 19,222–223: ἤδη γὰρ οἱ ἐεικοστὸν ἔτος ἐστίν, / ἐξ οὗ κεῖθεν ἔβη καὶ ἐμῆς **ἀπελήλυθε** πάτρης
'it is now the twentieth year since he went from there and is gone from my country'

(121) Cic. *Att.* 13,31,2: *quoniam* etiamnum ***abes***, *Dicaearchi quos scribis libros sane uelim mi mittas*
'since you are still away, I should like you to send me the books of Dicaearchus'

The examples discussed so far are all intransitive. In the active voice, the perfect of transitive verbs expresses past tense and current relevance, as in *peperi* 'have gained' (122a) and 'gained' (122b); and this is the function in which passive forms are often encountered as well, as in *parta est* 'has been earned' (122c). In the active voice, resultativity may be expressed with the help of the periphrastic construction with *habere*, such as *parta habemus* 'we have earned them and now we have them' (122d).[169]

(122) a. Cic. *epist.* 4,13,7: *illa … quae ipse ingenio studioque* ***peperisti***
'that which you have gained with your own genius and research'

167. See Bybee, Perkins, and Pagliuca (1994: 63–68), Johanson (2000: 110, 120), Lindstedt (2000: 368), and Dahl and Hedin (2000: 390–393); cf. Duhoux (2000: 426–430), Haug (2004), and Napoli (2006: 144–145).

168. See Lindstedt (2000: 367–368) and Johanson (2000: 112–114); cf. Tommola (2000: 462).

169. See Hofmann & Szantyr (1965 § 178.c.β). Kümmel (2000: 69) points to the functional similarities between the resultative perfect sometimes found in Indo-Iranian and the 'have' perfects in Latin and Greek; cf. Bybee, Perkins, and Pagliuca (1994: 68–74), Johanson (2000: 114), and Lindstedt (2000: 377–378).

b. Liv. 7,34,13: *aut quonam modo isti ex Sidicinis Campanisque uictoriam* ***pepererunt****?*
'or how did those people conquer the Sidicini and Campanians?'

c. Liv. 28,40,13: *cum ea gloria quae* **parta est** *uiuendum atque moriendum est*
'with such glory as has been already earned must I live and die'

d. Plaut. *Trin.* 346–347: *uirtute … et maiorum et tua / multa bona bene* ***parta habemus***
'thanks to our forebears and yourself, we're well supplied with well-earned means'

There are several examples of this construction with verbs indicating perception or knowledge. In the active voice *cognouit* means 'got to know' (123a), and in the passive voice *cognitum est* means 'has become known' (123b); but the construction with *habere* has a resultative function and means 'when you have acquired the knowledge and have full knowledge of' (123c). Another example of this opposition between past tense or perfect and resultativity is *perspexit* 'he has seen/saw clearly' (124a) and *perspectum habes* 'you have perceived and have full insight' (124b). The construction with *habere* indicates the maintenance of the result of an action.[170] This construction is also found with verbs meaning 'excuse' (125a) and 'divide' (125b).

(123) a. Ter. *Hec.* 161–162: … *postquam et ipse se / et illam et hanc quae domi erat* **cognouit** *satis*
'when he came to a proper understanding of himself and her and the wife he had at home'

170. See, e.g., Harris (1982: 47–49) and Vincent (1982: 79–85); Jacob (1995, 1996, 1998, 2001) has argued against the traditional interpretation of *habere* as having a possessive function and pointed to the valency function of this verb and compared the constructions with *habere* with the ones with the "dativus auctoris". A valuable collection of material is found in Thielmann (1885).

b. Cic. *Brut.* 144: *idque … apud centumuiros in M'. Curi causa* ***cognitum est***
'this has become known in the case of Manlius Curius before the centumvirs'

c. Cic. *fin.* 4,11: *cum* ***cognitum habeas*** *quod sit summi rectoris ac domini numen*
'when you have acquired the knowledge of – and thus realize – what the will of the supreme god is'

(124) a. Cic. *Verr.* II 3,71: *id quod tota Sicilia* ***perspexit***
'what all Sicily saw clearly'

b. Cic. *epist.* 3,10,7: *nam si me uirum bonum … in maximis rebus* ***perspectum habes***
'if you have satisfied yourself that I am an honourable man in affairs of the greatest gravity'

(125) a. Mart. 2,79,2: ***excusatum habeas*** me *rogo, ceno domi*
'I pray you have me excused, I dine at home'

b. Liv. 4,56,6: *nec … modo Romanos sua* ***diuisa habere***
'not only did the Romans have their possessions divided up among themselves'

The passive voice of the perfect often expresses current relevance, but sometimes also resultativity: *diuisum est* 'has been divided into' (126a) and *actum est* 'has been done' (127a) express current relevance, whereas *diuisa est* 'is divided into' (126b) and *actum est* 'is finished' (127b) have a resultative sense.[171] Another example of resultativity appears in the words ascribed to Caesar when crossing the Rubicon in January 49 BCE. At this dramatic occasion, he quoted an expression in the perfect imperative used by the Greek comedy writer Menander (e.g., *frg.* 40 line 4) and referred to as such in Plutarch (128a), but not in Suetonius, who according to the manuscript tradition uses the indicative (128b).[172]

171. See Squartini and Bertinetto (2000: 404–406); cf. Bybee, Perkins, and Pagliuca (1994: 69) and Tommola (2000: 462–463).

172. The German and English translations are resultative (e.g., Kind 1752: 492: "Der Würfel ist geworfen"; Rolfe 1951, 1: 45: "The die is cast"). Erasmus of Rotterdam conjectured *esto* in Suetonius (*Iacta alea esto* 'Let the die be cast!'): I am inclined to agree with him, because it would better suit the context.

(126) a. Cels. 7,15,1: *quod per ignem* ***diuisum est***, *minus celeriter coit*
'what has been divided by fire, heals less quickly'

b. Cic. *part.* 52: (peroratio) ... ***est diuisa*** *in duas partis, amplificationem et enumerationem*
'the peroration falls into two divisions, amplification and recapitulation'

(127) a. Cael. ap. Cic. *epist.* 8,8,4: *quod ad rem publicam pertinet, omnino* multis diebus ... ***actum*** *nihil* ***est***
'as far as politics is concerned, absolutely nothing has been done for many days past'

b. Ter. *Eun.* 984–985: *emit? perii hercle. quanti?* :: *uiginti minis. /* :: ***actumst***
'he has bought one? Oh Hercules! I am dead! For how much? :: Twenty minas. :: It is finished!'

(128) a. Plutarch. *Caes.* 32,8: ἀνερρίφθω κύβος!
'let the die be cast!'

b. Suet. *Iul.* 32–33: *eatur ... quo deorum ostenta et inimicorum iniquitas uocat.* ***Iacta*** *alea* ***est***
'let us take the course which the signs of the gods and the false dealing of our foes point out. The die is cast'

According to the traditional definition, however, the perfect participle is used as an adjective in cases like (126b), (127b), and (128b). A result of this somewhat ambivalent status of the passive perfect in Latin, is that *amatus sum* 'I have been / was loved' with time becomes a passive present 'I am loved' ((150)–(151) below, Section 3.1.5).[173]

There is sometimes an overlap in the passive voice between the present (*uestiuntur* 'are clothed'), and the perfect (*sunt uestiti* 'are clothed'; cf. (106) above, Section 3.1.1). An example of this use of the passive voice is *cingitur* 'is surrounded', to which there is a corresponding use of the active ((105) above, Section 3.1.1). Often, however, the overlap between the functions of the passive present and the passive perfect is not complete, as in expressions meaning 'is surrounded' (129); in (129b) the perfect may have to do with

173. Cf. Hofmann & Szantyr (1965 §§ 171d, 179 Zus. b) and Hoffmann (1997: e.g. 9–15).

the fact that the place where a prodigy took place is now surrounded due to human intervention (cf. this use of the imperfect tense in (222)–(223) below, Section 3.3.1).[174]

(129) a. Cic. *nat. deor.* 2,143: (oculi) *et excelsis undique partibus **saepiuntur***
'the eyes are shielded on all sides by surrounding prominences'
b. Cic. *div.* 2,85: *is **est*** hodie *locus **saeptus** religiose*
'that site (where the stone was found) is religiously guarded to this day'

Another example of this overlap is found when *inscribitur* and *inscriptus est* are used of books in the sense 'is called'; in this case Cicero uses *inscribitur* more often (8 examples) and *inscriptus est* less often (2 examples) (130); in (130b) the sense may very well be 'was called' (i.e., 'which I called'). But in Gellius some two hundred years later, the relationship is the reverse and there are twice as many examples of *inscriptus est* (20 examples) as of *inscribitur* (7 examples), and the two forms seems to be used in much the same function (131).[175]

(130) a. Cic. *Tusc.* 1,57: *in illo libro, qui **inscribitur*** Menon
'in the book entitled Menon'
b. Cic. *div.* 2,1: *nam et cohortati sumus, ut maxime potuimus, ad philosophiae studium eo libro, qui **est inscriptus*** Hortensius
'I also appealed as earnestly as I could for the study of philosophy in my work entitled *Hortensius*'

(131) a. Gell. 13,11,1: *lepidissimus liber est M. Varronis ex* Satiris Menippeis, *qui **inscribitur*** Nescis Quid Vesper Serus Vehat
'that is a very charming book of Marcus Varro, one of his *Menippean Satires*, entitled *You know not what the late evening may bring*'

174. Cf. Oldsjö (2001: 178–183).
175. Cf. Kühner & Stegmann (1955 § 31.5 Anm. 2); Hofmann & Szantyr (1965 § 170 Zus. b).

b. Gell. 15,3,1: *legimus librum M. Ciceronis, qui* ***inscriptus est*** Orator
'I read a book of Marcus Cicero's entitled *The Orator*'

In Classical Latin, the perfect thus indicates that an action has been performed, while the construction from which the various compound perfects of the Romance languages originally developed (the passé composé, the passato prossimo, etc.) underlined the fact that the action resulted in something. Resultative expressions tend, across languages, to lose their function and become perfects expressing current relevance. We can observe this development in the active voice ((154) below, Section 3.1.5). In the passive voice, the synthetic present tense forms are gradually replaced by the periphrastic forms that previously expressed resultativity or current relevance ((150)–(152) below, Section 3.1.5).[176]

3.1.4 Indirect present and simultaneity

In indirect speech, the simultaneous sense is expressed by a correspondence of tense between the matrix clause and the subordinate clause. If the matrix clause is in the present tense, the tense of the subordinate clause is in the present too (132a), but if the matrix clause is in the perfect used as a past tense (132b), or in the imperfect (132c), the tense of the subordinate clause is past too.[177]

(132) a. Cic. *nat. deor.* 3,17: *di utrum* ***sint*** *necne* ***sint*** quaeritur
'the question is whether the gods exist or not'
b. Cic. *fin.* 2,97: quaesiuit *saluusne* ***esset*** *clipeus*
'he asked if his shield was safe'
c. Cic. *Verr.* II 5,107: quaerebatur *ubi* ***esset*** *Cleomenes*
'the question was where Cleomenes was to be found'

176. See, e.g., Serbat (1975: 126), Harris (1978: 135), Pinkster (1987); cf. Johanson (2000: 129–131), Lindstedt (2000: 368), Squartini and Bertinetto (2000: 404–406), and Tommola (2000: 445–446); cf. also Haug (2004).
177. See Kühner & Stegmann (1955 §§ 180, 181) and Hofmann & Szantyr (1965 § 297.II.B); cf. Pinkster (1995: 125–126, 286) and Binnick (1991: 86–89).

The present tense, being a "principal tense" together with the simple future, is usually followed by principal tenses, such as the present (132a), the perfect ((261) below, Section 3.3.4), or the periphrastic future with a present of *esse* 'to be' in the subjunctive ((175) below, Section 3.2.3). The historical present is often treated as a principal tense (133), but there are exceptions and sometimes both constructions occur in the same passage ((263a) below, Section 3.3.4). When used as a present perfect, the Latin perfect indicates current relevance, and in such cases it is normally followed by the present subjunctive, whereas it is followed by the imperfect subjunctive when it functions as a past tense (cf. (132b)). In sentences of result, the present subjunctive is used after past tenses to denote continuance into the present (134). The present perfect is often treated as a principal tense, but often also as a historical tense ((263b–c) below, Section 3.3.4).

(133) Caes. *Gall.* 6,9,7: *Vbii* (Caesarem) ... petunt *atque* orant, *ut sibi* ***parcat***
'the Ubii beseech(ed) (Caesar) and pray(ed) him to spare them'

(134) Cic. *Verr.* I 12: (Verres Siciliam) *per triennium ita* uexauit *ut ea restitui in antiquum statum nullo modo* ***possit***
'Verres (has) so devastated Sicily for three years as to make it utterly impossible for it to be restored to its original condition'

If the subordinate construction is nonfinite, the simultaneous sense is expressed by present infinitives and participles. Of the transitive verbs – and also of several intransitive ones – there is one active (*uocare* 'to call') and one passive present infinitive (*uocari* 'to be called'); and of transitive and intransitive verbs there is one active present participle (*uocans* 'calling' and *moriens* 'dying'). The present infinitive is used in the simultaneous function in the accusative with the infinitive construction (135) and the present participle in the corresponding construction with the participle (136a). The present participle frequently occurs in the accusative with participle after verbs of perception (136a) and in absolute constructions which function as temporal adverbials (136b).[178] The future infinitive is often preferred when indicating

178. See Kühner & Stegmann (1955 §§ 136.1 & 4.a, 138.3 & 5) and Hofmann & Szantyr (1965 §§ 206, 207); cf. Pinkster (1995: 304–306), Binnick (1991: 84, 95–96), Laughton

a future action ((178) below, Section 3.2.3), but sometimes the present infinitive appears instead (137).[179]

(135) Liv. 5,20,1: *dictator cum iam in manibus uideret uictoriam* ***esse***, *urbem opulentissimam* ***capi*** *… litteras ad senatum misit*
'the dictator saw that the victory was at last within his grasp, and that a city of great wealth was on the point of being taken; he sent a letter to the senate'

(136) a. Cic. *fin.* 3,7: *uidi* (Catonem) *in bibliotheca* ***sedentem*** *multis circumfusum Stoicorum libris*
'I saw M. Cato sitting in the library surrounded by a lot of Stoic books'
b. Cic. *Brut.* 39: (Athenae) ***Seruio Tullio regnante*** *uiguerunt*
'Athens flourished when Servius Tullius ruled'

(137) Ter. *Phorm.* 531–532: *cras mane argentum mihi / miles* ***dare*** *se dixit*
'the soldier said that he will give me the money tomorrow'

Sometimes, however, in a narrative context the infinitive is used instead of a finite form indicating absolute and usually past tense. This "historical infinitive" occurs in Latin in vivid and excited descriptions. It corresponds to the narrative perfect in that it is often used of several actions following on one another (cf. *ueni, uidi, uici* in (292) below, Section 4.1.1), but it is also used in a more descriptive manner; it is common in Early and Classical Latin and also in the later periods but decreases in Late Latin (138).[180]

(138) Caes. *Gall.* 1,32,3: *nihil Sequani* ***respondere***, *sed in eadem tristitia taciti* ***permanere***
'the Sequani made no reply, but continued in the same sullen silence'

(1964: 20–28), and Comrie (1985: 60–61).

179. See Kühner & Stegmann (1955 § 126.2 Anm. 1).

180. See Kühner & Stegmann (1955 § 34) and Hofmann & Szantyr (1965 § 200.c); cf. Oldsjö (2001: 378–391).

The semantic value of the historical infinitive has been much disputed and a great variety of interpretations have been presented, including ingressivity (due to an ellipsis of the word *coepi*, as suggested by Quintilian in *inst.* 8,6,21), vividness of the storytelling, imperfectivity, and perfectivity (cf. (365) below, Section 4.1.7).[181]

In some cases there is a seeming overlap between the present and perfect infinitives. In Early Latin the perfect infinitive sometimes occurs in prohibitions with *uelle* (139a) or *nolle* (139b) referring to the moment 'now'; this construction is poetic and archaic in Classical Latin (139c). This usage is related to the use of the perfect subjunctive in, for instance, prohibitions like *ne hoc feceris* 'do not do this', which (as opposed to the construction *ne habuisse uelit*) is retained in Classical Latin ((189)–(191) below, Section 3.2.4), and to the prohibition formula with *noli* 'do not want to!' and the present infinitive often found in the later texts (cf., e.g., Vulg. *Ioh.* 20,17: *noli me tangere* 'do not touch me!').[182] A similar use of the infinitive is found after verbs indicating ability, such as *posse* 'to be able to' (140a), and aiming at or wishing for, such as *expeto* 'desire' (140b), or expressions like *melius est* 'it is better' (140c) and *iuuat* 'it helps, it is advantageous' (140d) (cf. (267) below, Section 3.3.4).[183]

(139) a. CIL I^2.581.3: nei*quis eorum Sacanal (*Bacchanal*)* ***habuise*** uelet
'let none of them have in mind to have a place for Bacchic worship'

b. Plaut. *Poen.* 872: nolito *edepol* ***diuellisse***
'by Pollux, stop plucking them!'

c. Liv. 39,17,3: ne *quis quid* ... ***uendidisse*** *neue* ***emisse*** uellet
'nobody should sell or buy anything'

181. See Dressler (1968: 105–112, 123–155), cf. Moore (1934: 89) and Pinkster (1995: 312); Viljamaa observes (1983: e.g. 93) that of the examples of the historical infinitive in Livy, the stative and atelic forms of actionality are far more common than the telic and momentaneous ones.

182. See Hofmann & Szantyr (1965 § 193); cf. Kühner & Stegmann (1955 § 33.10).

183. Pinkster (1995: 306) regards these examples as "useless as a (partial) basis for an aspectual theory"; cf. Clackson and Horrocks (2007: 193–194). For the survival of such constructions in Roman historiography, see (282) below, Section 3.3.5.

(140) a. Plaut. *Aul.* 828: *non* potes ***probasse*** *nugas*
'you cannot accept nonsense'

b. Enn. *scaen. inc.* 402 ap. Cic. *off.* 2,23: *quem quisque odit,* ***perisse*** expetit
'whom anyone hates, he desires to be dead'

c. Cic. *Att.* 14,10,2: melius fuit ***perisse*** *illo interfecto … quam haec uidere*
'it were better to have perished when he was killed than to see such things'

d. Verg. *Aen.* 3,282–283: iuuat ***euasisse*** *tot urbes / Argolicas mediosque fugam* tenuisse *per hostis*
'glad to have slipped past so many Argive towns, and kept on their flight through the midst of foes'

Among the passive infinitives, the synthetic present indicates simultaneity (135), whereas the analytic perfect infinitive indicates anteriority or resultativity ((264b–c) below, Section 3.3.4). There is, however, a certain overlap between the resultative expressions and those expressing simultaneity in the passive voice, and as a result an expression like *esse probata* may even indicate simultaneity rather than anteriority (141).[184] In (141a), however, there is a construction with *possum* 'be able to, can', just as in (140a).

(141) a. Vitr. 6 praef. 4: *et ea, non potest* **esse probata** *sine litteraturae encyclioque doctrinarum omnium disciplina*
'a calling, wherein one cannot pass muster without knowledge of letters and of the liberal arts'

b. Vitr. 7,5,4: *neque enim picturae* **probari** *debent, quae non sunt similes ueritati*
'for pictures cannot be approved which do not resemble reality'

When it occurs in periphrastic constructions such as *amans sum*, the function of the present participle in Early and Classical Latin is still that of an adjective rather than of an aspectual periphrasis (cf. (395)–(401) below, Sec-

184. See Hofmann & Szantyr (1965 § 170 Zus. d).

tion 4.2.4). Plautus's use of *sciens* in (142a) is related to his use of the participle in the sense 'conscious, aware of' in, for instance, (142b) rather than his use of *scias* in (142c). In Cicero, the use of *est loquens* (143a) and *est* … *dicens* (143b) appears to be closer in function to that of an aspectual periphrasis, and they mean 'is talking' and 'is saying' respectively, but the participle is used as an attribute to the noun (in these cases *Socrates*) in references to particular passages in Plato, whereas the finite verb *loquitur* occurs in a reference to Socrates in Plato's work generally (143c).[185]

(142) a. Plaut. *Poen.* 1038: *Carthagini ego sum gnatus, ut tu* ***sis sciens***
'I am a native of Carthage myself, I may inform you = 'so that you are aware of it'

b. Plaut. *Poen.* 112–113: *sed dissimulat* **sciens** */ se scire*
'but knowing, he dissembles his knowledge' = 'knowing pretends not to know'

c. Plaut. *Poen.* 1029: *at ut* **scias**, *nunc dehinc latine iam loquar*
'well, so that you may understand it, I shall now speak Latin for the future'

(143) a. Cic. *orat.* 41: ***est*** *enim, ut scis, quasi in extrema pagina* Phaedri *his ipsis uerbis* ***loquens*** *Socrates*
'as you know, at the end of *Phaedrus* Socrates is uttering the following words'

b. Cic. *div.* 1,52: ***est*** *apud Platonem Socrates, cum esset in custodia publica,* ***dicens*** *Critoni, suo familiari, sibi post tertium diem esse moriendum*
'in Plato there is Socrates who, while in prison, says in a conversation with his friend Crito "I am to die in three days"'

185. See Kühner & Stegmann (1955 §§ 40.1, 137) and Hofmann & Szantyr (1965 § 207.d). Earlier research tended to regard such passages as early examples of the later aspectual use of such periphrastic forms: see, e.g., Löfstedt (1911: 246) and Hofmann & Szantyr (1965 § 207.d); more recent scholars have been more cautious in this respect. Eklund (1970: 74) observed that many of the alleged attestations from the earlier periods of Latin should be classified as adjectival rather than verbal; cf. also Hoffmann (1997); Piras (1989/1990) and Amenta (2003).

c. Cic. *rep.* 1,16: *cuius in libris* (Platonis) *multis locis ita **loquitur** Socrates*
'in whose (Plato's) books Socrates speaks in such a way in several passages'

The border between the cases in which the present participle has a predicative function and those with a periphrastic present is, however, not always perfectly delineated, and in the later periods there is sometimes a tendency to use the periphrastic construction instead of the ordinary present (e.g., (149) below, Section 3.1.5).

The perfect participles generally indicate anteriority (cf. (264)–(265) below, Section 3.3.4). The perfect participles of some deponents are, however, sometimes used to express simultaneity (*arbitratus* 'thinking', *complexus* 'embracing', *usus* 'using', etc.). One example is *ueritus* 'fearing' (144a); but in this sense the present participle *uerens* can occur as well (144b).[186]

(144) a. Caes. *Gall.* 5,3,6: ***ueritus*** *ne ab omnibus desereretur*
'fearing that he might be deserted by all'
b. Nep. *Hann.* 9,2: ***uerens*** *ne dederetur*
'fearing that he would be handed over (to the enemy)'

Caesar always uses *ueritus* in this function, whereas his contemporary Cornelius Nepos always prefers *uerens*. Caesar thus prefers the traditional and less "analogical" form in this case; this attitude toward language contrasts with the opinions he expressed in his work *De analogia* 'On analogy'.[187] Caesar's preference regarding the use of *ueritus*, however, agrees with the majority of Classical Latin authors and texts, although there are some examples of *uerens* as well in literary authors including Nepos (6 examples) and Cicero (4 examples).

The semantic function of the gerundive of active verbs is passive; it often indicates deontic modality. It resembles the present participle in the sense that its temporal reference is simultaneous (145). The gerund is active and functions as a verbal noun (146a); when used in the instrumental ablative it

186. See Kühner & Stegmann (1955 § 136.4.b.β) and Hofmann & Szantyr (1965 §§ 162.c Zus. ε, 209.a); cf. Laughton (1964: 13–15).
187. See, e.g., Conte (1994: 124–125, 231).

overlaps with the function of the present participle and in the later periods it gradually replaces this form (146b); there are cases where the two constructions overlap already in Classical Latin (146c), and the number of examples grows in later Latin.[188]

(145) a. Cic. *Phil.* 10,13: *qui et antea … laudatus … et hoc tempore merito* ***laudandus est***
'who was praised before and who deserves to be praised now as well'

b. Ter. *Phorm.* 364–365: agrum … / ***colendum*** *habebat*
'he had some land to farm'

(146) a. Cic. *Brut.* 65: *quis illo grauior* in ***laudando***, *acerbior* in ***uituperando*** *… ?*
'who is more powerful than he in praising, or more sharp in criticizing?'

b. Plaut. *Truc.* 916: *ita miser* ***cubando*** *in lecto hic* ***expectando*** *obdurui*
'thus lying unhappy here in bed and waiting (for her) I have become hard'

c. Liv. 24,4,9: *… ceteros tutores summouet … iuuenem iam esse* ***dictitans*** *Hieronymum ac regni potentem;* ***deponendo****que tutelam ipse … in se unum omnium uires conuertit*
'he removed the rest of the guardians, saying that Hieronymus was now a young man and capable of ruling. And laying down his own guardianship, he took for himself alone the powers of them all'

The *supine* is a verbal noun which, like the infinitive and the gerund, has simultaneous or tenseless temporal reference; it occurs most often in the ablative (147a) and accusative (147b).[189]

(147) a. Verg. *Aen.* 1,439: *mirabile* ***dictu***
'remarkable to say'

188. See Kühner & Stegmann (1955 §§ 129, 130–135) and Hofmann & Szantyr (1965 §§ 201, 202, 203).

189. See Kühner & Stegmann (1955 § 128) and Hofmann & Szantyr (1965 §§ 204, 205).

b. Caes. *Gall.* 1,30,1: *ad Caesarem* ***gratulatum*** *conuenerunt*
'they assembled in Caesar's camp to congratulate him'

As opposed to the gerund, the supine gradually dissappears, but in later centuries it is still found in fixed expressions such as *mirabile dictu*. In less elegant texts, however, this construction is often replaced by *ad* and the gerund.[190]

3.1.5 The development

Of the forms in the indicative, the present and imperfect remain relatively stable through the centuries. However, in Late and Medieval Latin the present tense is sometimes used instead of the simple future (148); there are parallels to this usage in earlier texts ((103)–(104) above, Section 3.1.1), but in the later centuries the number of examples seems to grow.[191]

(148) Greg. Tur. *Franc.* 2,7: *si fideliter petitis, dominus uelociter* ***adest***
'if you ask for it earnestly, Our Lord will soon be here'

In Late Latin there is a growing number of periphrastic expressions with the present participle and a form of *esse* 'to be'. These expressions resemble the later progressives of the Romance languages but differ from them in that they do not always express progressivity. Many of these expressions are in the past tenses ((395)–(401) below, Section 4.2.4), but examples do exist in the present (149a) and in the future (149b).[192]

190. See Hofmann & Szantyr (1965 § 205).
191. See Kühner & Stegmann (1955 § 31.7), Hofmann & Szantyr (1965 § 172), and Stotz (1998–2000, 4 § 57); cf. Bonnet (1890: 634–636), Garvin (1946: 70), Salonius (1920: 276–280), and Löfstedt (1933: 49–50).
192. See Pinkster (1998: 230); cf. Eklund (1970: e.g. 74) and Bertinetto, Ebert, and de Groot (2000: 530–531); a recent study on such constructions in later Latin and Greek is Amenta (2003); on Italian see Giorgi and Pianesi (1997: 175); on the development in Romance see Squartini (1998).

(149) a. Vet. Lat. *Col.* 1,6 codd. 75, 77, 86: *et* ***est fructificans*** *et* ***crescens*** *sicut in uobis ex qua die audistis et cognouistis gratiam dei in ueritate*
(NT καὶ ἐστὶν **καρποφορούμενον** καὶ **αὐξανόμενον** καθὼς καὶ ἐν ὑμῖν, ἀφ' ἧς ἡμέρας ἠκούσατε καὶ ἐπέγνωτε τὴν χάριν τοῦ θεοῦ ἐν ἀληθείᾳ)
'and it is giving fruit and growing in you since the day when you heard it and became acquainted with God's grace'

b. Vulg. *Is.* 17,5: *et* ***erit*** *sicut* ***congregans*** *in messe quod restiterit et brachium eius spicas leget et* ***erit*** *sicut* ***quaerens*** *spicas in ualle Rafaim*
(LXX καὶ ἔσται ὃν τρόπον ἐάν τις συναγάγῃ ἀμητὸν ἑστηκότα καὶ σπέρμα σταχύων ἐν τῷ βραχίονι αὐτοῦ ἀμήσῃ, καὶ ἔσται ὃν τρόπον ἐάν τις συναγάγῃ στάχυν ἐν φάραγγι στερεᾷ)
'and it shall be as when the reaper gathers standing grain and his arm harvests the ears, and as when one gleans the ears of grain in the Valley of Rephaim'

This development starts in Late Latin, where there is an increasing number of such constructions especially in the translations of the Bible, but it was grammaticalized first in the separate Romance languages.[193] One problem with these examples, however, is that many of them occur in texts translated from Greek and from a kind of Greek which might have been influenced by Semitic, namely translations of the Bible (Rubio, this work, vol. 1).

In later Latin there is a development where the constructions with perfect participles and forms of *esse* gradually cease being perfect forms. In this new system the passive present *amatur* is replaced by expressions like *amatus est* in the sense 'is loved'. The earlier examples are often in the subjunctive ((142a) above, Section 3.1.4): *auditus sit* is used in the sense of *audiatur* in (150), and *electae sint* 'are elected' in (151a) corresponds to *eligantur* in that sense in an earlier text (151b). In some cases, a construction with *fio*

193. See Bertinetto (2000: 561–566), Bertinetto, Ebert, and de Groot (2000: 530–531, 538); cf., e.g., Haverling (2005b), Pinkster (1998: 230), Hofmann & Szantyr (1965 § 207d), and Hopper and Traugott (2003: 158–159).

and the perfect participle (152a) corresponds to a synthetic passive in a more elegant Late Latin text (152b). Similarly, in the translations of the Bible the construction with the gerundive and *esse* sometimes corresponds to passive constructions in the Greek text or the Vulgate (153).[194]

(150) *Itin. Eger.* 36,3: *ut … ad ciuitatem gemitus populi omnis* ***auditus sit***
'so that the sigh of all the people is heard all the way to the city'

(151) a. Pallad. 1,28,3: *sed* ***electae*** *… nutrices gallinae* ***sint****, quae…*
'but the hens should be elected, who … '
b. Colum. 8,11,11: *sed ueteres maximae quaeque gallinae uernaculi generis* ***eligantur***
'but the old and big hens of the indigenous kind should be elected'

(152) a. Chiron 307: *maxillae* ***constrictae fient***
'the jaws are tied together'
b. Veg. *mulom.* 2,92,2: ***astringuntur*** *aliquando maxillae*
'the jaws are sometimes tied together'

(153) a. Vulg. *II Petr.* 3,11: *cum haec omnia* ***dissoluenda sint***
(NT τούτων … πάντων λυομένων)
'since all these things are thus to be dissolved'
b. Vet. Lat. *iud.* 12 ap. Lucif. *non conv.* 15 p. 33,28: *nubes … omni uento* ***circumferendae***
'the clouds are moved around by all the wind'
(LXX παραφερόμεναι; cf. Vulg. *iud.* 12: *quae a uentis circumferuntur*)

In Late Latin, examples of the perfect participle and a present of *esse* 'to be' in the function of a present passive grow more frequent. As a result there is also a growing number of cases where expressions like *condita fuit* replace the passive perfect *condita est* 'was founded' ((270)–(275) below, Section 3.3.5).

194. See Hofmann & Szantyr (1965 § 170 Zus. d); cf. Svennung (1935: 456–461); and Kiss (1982: 23–26), who discusses this development in connection with the development of the deponents.

In Early and Classical Latin there are resultative expressions of the type *perspectum habeo* ‘I have perceived and have full insight’ ((124b) above, Section 3.1.3 above). In Late Latin, the number of examples grows, but the first examples in which such expressions clearly express current relevance and not resultativity are from the sixth century (154a); in the same period there is also an example in which the participle is no longer treated as an attribute to a noun in the clause (154b). Similar constructions exist with a past tense form of *habeo* (154c).[195] Gregory of Tours has such examples in passages describing what people are saying; this can be compared with his use of the periphrastic future with *habere* in such a passage as well ((204) below, Section 3.2.5).

(154) a. Greg. Tur. *vit. patr.* 3,1: *ecce episcopum cum duce et ciuibus* ***inuitatum habes****, et uix nobis supersunt quattuor uini amphorae*
‘and look you have invited the bishop with the governor and the people in the province, and we have only four amphorae of wine that are not totally full left’

b. Oribas. *syn.* 7,48: *omnia* ***probatum habemus***
‘we have examined everything’

c. Greg. Tur. *Franc.* 7,22: ***deliberatum*** ... ***habui****, ut ... te prius interfectum, quantuscumque deinceps clericos repperissem, in morte prosternerem*
‘I had thought, that I would first kill you and then as many clergymen as I could find’

In Romance the opposition between perfective past and present perfect is reintroduced with the creation of the periphrastic construction (Fr. “passé composé”, It. “passato prossimo”). The change from resultative to perfect follows a pattern known to us from many languages in the world. The last

195. See Hofmann & Szantyr (1965 §§ 178.c.β, 181), Kiss (1982: 10), where further examples are given, and Stotz (1998–2000, 4 § 65); cf. also Bonnet (1890: 689–690). Perfects and resultatives are often created according to this pattern, i.e., from stative verbs like *habeo* ‘have’; another source is represented by movement verbs such as ‘come (from)’ (cf. Fr. *je viens de manger* ‘I have just eaten’): see Bybee, Perkins, and Pagliuca (1994: 63–65).

step in that development, the one in which the new periphrastic perfect develops from a perfect to a perfective past tense, was taken first in Romance.[196]

Several changes hit the perfectum tenses in later Latin. One of them is connected with the changes in the actional system: the more frequent use of previously stative perfect forms in a dynamic function (*tacui* in the sense 'I stopped talking' or *habui* in the sense 'I received'; cf. Sections 3 above and 4 below). Other changes which affect the perfect indicative are (a) the tendency to use previously resultative expressions to indicate current relevance and (b) the tendency to use expressions which previously indicated anteriority as normal perfect forms ((270)–(275) below, Section 3.3.5).

3.2 The future

The future is more uncertain and speculative than the present or the past, since any prediction we make about it might be changed by intervening events. It is therefore hardly surprising that there is a relationship between future and mood in the languages of the world. That there is a relationship between epistemic modality and future is obvious in Latin, where several forms expressing simple future are old subjunctives. In a later development, new futures are formed from various periphrases expressing modality.[197]

196. On this development see, e.g., Rohlfs (1949–1954, 2 § 567; 1949–1954, 3 §§ 672–673), Harris (1971, 1982), Petersmann (1977: 177–182), Pinkster (1987), Vincent (1988a: 56), Hewson (1997b). The distinction is still made in, e.g., Spanish (cf. Green 1988: 111) and Southern Italian (cf. Vincent 1988b: 301), but has vanished in colloquial French (cf. Harris 1988: 228) and Northern Italian (cf. Vincent 1988b: 300). On the corresponding construction with ἔχω 'have' in Ancient Greek, see, e.g., Horrocks (1997: 77–78, 228–229, 273–274, 332); according to Drinka (2003), the development of the construction with *habeo* in Latin was influenced by the Greek construction. On the typological pattern, see Bybee, Perkins, and Pagliuca (1994: 105).

197. See Comrie (1985: 43–48); cf. Hofmann & Szantyr (1965 §§ 173, 175), Binnick (1991: 66–73, 119–123), and Bhat (1999: 131–133).

3.2.1 The simple future

The simple future may occur with adverbs locating the action or situation in the future, such as *cras* 'tomorrow' (155a), but also with adverbs which like *hodie* 'today' include the present moment (155b). It indicates a future action on its own (156a), and it is often found with an adverb like *umquam* 'ever' (156b). The speaker who chooses the simple future often implies that his prediction will prove to be true (157a); as a result the future often has a hortative function (157b).[198]

(155) a. Plaut. *Curc.* 660: *hic nuptialem* (cenam) cras ***dabit***
'tomorrow he will give us a nuptial dinner'

b. Plaut. *Amph.* 298: *hic pugnis* ***faciet*** hodie *ut dormiam*
'this one will with his fists see to it today that I sleep'

(156) a. Plaut. *Asin.* 606: *bene uale: apud Orcum te* ***uidebo***
'farewell: I shall meet you in the afterlife'

b. Liv. 22,60,14: *si tot exempla uirtutis non mouent, nihil* umquam ***mouebit***
'if so many brave examples could not move you, nothing ever will'

(157) a. Plaut. *Most.* 559: *tam facile* ***uinces*** *quam pirum uolpes comest*
'and you will win as easily as a fox eats a pear'

b. Plaut. *Asin.* 373: *tu* ***cauebis***, *ne me attingas, si sapis*
'you will beware not to touch me, if you are wise'

Not surprisingly, there is some overlap between the use of the present and the future. The simple future is sometimes found in references to the immediate future (158), where the present may sometimes also be encountered ((103) above, Section 3.1.1). It is also used to indicate a general truth (159). The simple future is used in subordinate clauses when the action is simultaneous to a future action expressed by a future (160a), an imperative (160b), or a subjunctive (160c) in the main clause; modern Scandinavian and English usually have the present in such cases. The rule represented in (160) is not always

198. See Kühner & Stegmann (1955 § 36) and Hofmann & Szantyr (1965 § 174). On futures used as imperatives, see Bybee, Perkins, and Pagliuca (1994: 273–274).

obeyed very strictly, however, and the present tense is not rare in subordinate clauses in such cases even in Early (161a) and Classical Latin (161b); Cicero may choose both constructions in two successive sentences (161c).[199]

(158) Plaut. *Amph.* 17–18: *nunc cuius iussu uenio et quam ob rem uenerim / **dicam** simulque ipse **eloquar** nomen meum*
'now I shall tell you at whose order I come and for what reason I come and at the same time I shall tell you my name'

(159) Cic. *Tusc.* 3,14–15: *non **cadet** … in sapientem aegritudo … aegritudo perturbatio est animi: semper igitur ea sapiens **uacabit***
'bad temper will never hit the wise, since bad temper is an upsetting of the mind; and the wise will always lack that'

(160) a. Cic. *off.* 1,100: (naturam) *si **sequemur** ducem, numquam* aberrabimus
'if we follow nature as our guide, we shall never go astray'

b. Cic. *de orat.* 1,208: *quae si uobis … non **probabuntur**, uestram iniquitatem* accusatote
'but if they do not commend themselves to you, pray, blame your own unfairness'

c. Cic. *off.* 2,43: *qui adipisci ueram gloriam **uolet**, iustitiae* fungatur *officiis*
'whoever wants to win true glory, let him discharge the duties required by justice'

(161) a. Plaut. *Mil.* 1213–1214: *libertatem tibi ego et diuitias* dabo, */ si **impetras***
'I shall give freedom and riches, if you carry it through'

b. Cic. *Tusc.* 1,15: perfice, *si **potes***
'finish it, if you can'

c. Cic. *ad Q. fr.* 1,1,32: *quibus si* aduersamur, *ordinem de nobis optime meritum … et a nobis et a re publica **diiungemus**; sin autem omnibus in rebus **obsequemur**, funditus eos perire **patiemur** quorum … saluti … consulere debemus*

199. See Kühner & Stegmann (1955 § 36.5 Anm. 4 and 5).

‘if we resist them, we will separate the senate from us and from the republic; but if we obey them, we will accept that those for whom we should care will perish totally’

In cases like (161), there thus seems to be a partial overlap between the present and the simple future.[200]

3.2.2 The future perfect

The active forms of the future perfect were originally short-vowel subjunctives created from the aorist stem; they contain the Proto-Indo-European suffix **-is-* added to the perfect stem. They closely resemble the active forms of the perfect subjunctive which contain the morpheme of the old Proto-Indo-European optative (-ih_1-). The original difference in the length of the *-i-* in the second singular and in the first and second plural was soon blurred, and in the later language there was much contamination between the future perfect and the perfect subjunctive, which differed only in the first singular (*amauero*/*amauerim*; cf. (211) below, Section 3.2.5).[201]

The future perfect indicates absolute-relative time: it describes the completed action which precedes another future action or situation. It occurs with temporal adverbials referring to the future (162). Classical Latin is often very precise in indicating the relative sequence of the various actions and indicates which future action comes first and which comes next (163a); the fact that the action or situation indicated by the future perfect precedes another one is underlined by the use of the future perfect in clauses introduced by *priusquam* ‘before’ (163b).[202]

200. This is perhaps to be expected, since according to Bybee, Perkins, and Pagliuca (1994: 274), futures tend to be rare in subordinate clauses (e.g., in hypothetical *if* and *when* clauses) in the languages of the world.

201. See Hofmann & Szantyr (1965 § 180) and Baldi (2002: 399, 401, 403); cf. Blase (1898), Bennett (1910: 53–59), and Leumann (1977 § 444).

202. See Kühner & Stegmann (1955 § 37) and Hofmann & Szantyr (1965 § 180.b); cf. Comrie (1985: 64, 69–74) and Pinkster (1995: 294–295).

(162) Plaut. *Merc.* 586–587: *metuo ego uxorem,* cras *si rure* ***redierit****, / Ne illam hic offendat*
'I am afraid of my wife's popping in on her, if she comes back from the country tomorrow'

(163) a. Cic. *epist.* 5,19: *si* ***feceris****, magnam* habebo *gratiam; si non* ***feceris***, ignoscam
'if you do it, I shall be very grateful; if you do not I shall forgive you'

b. Cic. *Flacc.* 51: *itaque etsi teneo quid sit dicere paratus, nihil tamen contra disputabo* priusquam ***dixerit***
'although I thus know what he is prepared to say, I shall not argue against it before he has spoken'

In Early Latin, there are "sigmatic" futures formed with -*s*-; of these forms, *faxo* 'I shall see to it' often has a perfective character (164a), but, like normal future perfects, these forms often seem to express anteriority in the future, as indicated by the use of such a form after *priusquam* 'before' (164b); in some cases the -*s*- has been rhotacized (164c).[203] Corresponding "sigmatic" optatives are used in the same function as the perfect subjunctive ((192)–(194) below, Section 3.2.4).

(164) a. Plaut. *Rud.* 578: *tu istaec mihi dato:* exarescent ***faxo***
'give me those things: I shall see to it that they get dry'

b. Pacuv. *trag.* 325 ap. Non. p. 74,30: *haud sinam quidquam profari* priusquam ***accepso*** *quod peto*
'no, I'll not let you speak a single word, before I have received what I demand'

c. Pacuv. *trag.* 30 ap. Non. p. 507,24: *dici quid faciam; quod me* ***moneris*** *effectum dabo*
'tell me what I should do; I'll bring about that which you advise'

Where Latin uses the future perfect (or in Early Latin at times the sigmatic future), in temporal clauses indicating a future action which takes place before the action or situation indicated by the simple future, Greek has the aorist

203. See Rix (1998: 621–622, 624); cf. de Melo (2007: 171–190, 215–223, 305–335).

subjunctive. Perfectives with future use are rare in the languages of the world and sometimes tend to indicate future perfect, as probably at an early stage in Latin and as in Classical Greek.[204]

At some point in Archaic Latin, what was probably once an aspectual opposition was thus reinterpreted as indicating the relative sequence of events.[205] In Early and Classical Latin there is a system that is particularly sensitive to whether a future action precedes another (165a) or should be regarded as completed in the future (165b); and it occurs with some stative expressions, for instance those meaning 'be able to', as in 'I shall train him so, if I can' (165c).

(165) a. Plaut. *Pseud.* 510–514: excludito *mi hercle oculum, si* ***dedero***. :: *Dabis. / iam dico ut a me caueas.* :: *Certe edepol scio, / si* ***apstuleris***, *mirum et magnum facinus* ***feceris***. / :: Faciam. :: *Si non* ***apstuleris***? :: *Virgis* caedito. */ sed quid, si* ***apstulero***?
'you can knock my eye out, by Hercules, if I do give it. :: You will. I warn you now to look out for me. :: By Pollux, if I do get it, I'll certainly credit you with an exploit marvelous and mighty. :: I will. :: And if you fail? :: Lay on the lash. But what if I succeed?'

b. Cic. *Catil.* 2,11: *quos si meus consulatus* ***sustulerit*** … *multa saecula* ***propagarit*** *rei publicae*
'if my consulship shall have done away with these men it will have prolonged the life of the republic for many centuries'

c. Cic. *de orat.* 2,85: *oratorem sic* instituam, *si* ***potuero***
'I shall train the orator in such a way, if I can'

Sometimes, however, the anteriority of one future action compared to another is less clear. This is particularly often the case when it occurs in main clauses.

204. See Smyth (1956 §§ 2325, 2444); cf. Moore (1934: 78) and Rijksbaron (1994: 79); Greek is less attentive to absolute-relative tense: see Kühner & Gerth (1898 § 389.4); cf. Bybee, Perkins, and Pagliuca (1994: 278).

205. This is the traditional interpretation met with in, e.g., Kühner & Stegmann (1955 § 37) and Hofmann & Szantyr (1965 § 180); Pinkster (1995: 287–288, 294–295) criticizes it but does not present an alternative explanation for the lack of consistency met with in this respect in Early and Classical Latin; cf. Clackson and Horrocks (2007: 211–212).

Three different interpretations have been proposed: the traditional one is that in such cases there is a residue of the earlier aspectual opposition;[206] another is that there is a partial overlap between the simple future and the future perfect;[207] and a third is that the future perfect always expresses absolute-relative time and thus in these cases too.[208] There are several examples in Plautus (166a–b), but also in Cicero (166c). Often the verb is in the stative actionality, as in expressions like 'have', for example in 'tomorrow I shall have a party' ((166a); cf. (165c)), but there are also telic and momentaneous examples, for instance in phrases which hint at a secure and swift change in the future (166b–c).[209]

(166) a. Plaut. *Cas.* 786–787: *ego cras hic ero: /* cras ***habuero***, *uxor, ego tamen conuiuium*
'tomorrow I shall be here: tomorrow, my dear, I shall have my share of the entertainment'

b. Plaut. *Trin.* 710: *eodem pacto, quo huc accessi,* ***apscessero***
'in the same manner as I came here, I shall get out'

c. Cic. *Att.* 3,19,1: *si ea* (salus) *praecisa erit nusquam facilius hanc miserrimam uitam uel* sustentabo, *uel, quod multo est melius,* ***abiecero***
'if that hope is cut off I could not find a better place either to drag on my miserable existence or, what is preferable, to end it'

The fact that the future perfect occurs with some frequency at the ends of lines in comedy, which suggests that metric considerations may have determined the choice, has been pointed at as an argument in favor of the overlap between the futures in these cases,[210] but this argument is hardly conclusive for a semantic overlap between the two forms, especially as the future perfect

206. E.g., Kühner & Stegmann (1955 § 37.2 & 3) and Hofmann & Szantyr (1965 § 180.a & b).
207. E.g., Sjögren (1906) and Bennett (1910: 53–59).
208. E.g., Gaffiot (1933) and Risselada (2000).
209. See Bennett (1910: 54–56) for numerous examples.
210. See Bennett (1910: 57) and Pinkster (1995: 294-295).

does occur in other positions too.[211] The circumstance that the future perfect tends to occur in subordinate rather than main clauses, while the simple future tends to occur in main rather than subordinate clauses, suggests that there is a functional difference between the two forms. This impression is strengthened by the observation that the future perfect, when occurring in main clauses, often appears in contexts where there is already another future time reference to which it relates.[212]

A form often found in the future perfect is *uidero* 'I shall (have) seen'. It is in fact more common than the simple future: Plautus has 8 examples of *uidero* against 4 of *uidebo*, and Cicero has 52 examples of *uidero* against 25 of *uidebo*. The future perfect is more common in subordinate clauses, such as conditional (167a) or temporal clauses introduced for instance by *cum* 'when' (167b) or *priusquam* 'before' (172) below; the simple future is more common in main clauses, but it occurs in a clause introduced by *dum* 'while' (168a). In main clauses, the simple future often indicates physical perception (168b), whereas the future perfect is often used to indicate the deferment of a matter for the present (167c–d). Although the absolute-relative function of the future perfect is not always crystal clear in these cases, there seems in most cases to be a functional difference between the two forms.[213]

(167) a. Cic. *epist.* 14,1,3: *quem ego diem si* ***uidero*** . . . , *satis magnum mihi fructum uidebor percepisse et uestrae pietatis et meae*
'if I shall see that day, I shall think that I have had great enough benefit both from your affection for me and mine for you'

b. Cic. *epist.* 8,15,2: *hui, uereor, quod solet fieri, ne cum te* ***uidero*** *omnia* obliuiscar
'alas I fear as so often happens, when I see you, I shall forget everything (that I want to tell you)'

211. See Risselada (2000: 29). Five of eight examples of *uidero* in Plautus occur at the end of the line.
212. See Risselada (2000: 28, 33–35); for a discussion cf. also de Melo (2007: 21–50).
213. Pinkster (1995: 295 n. 20) refers to such expressions as *de me uidero* as "the use of the future perfect without anterior meaning"; cf. de Melo (2007: 47–48).

c. Cic. *fin.* 1,10,35: *quae fuerit causa,* mox ***uidero;*** interea *hoc* tenebo … *uirtutem iis per se ipsam causam non fuisse*
'I shall soon see what the reason was; meanwhile I shall maintain virtue in itself was not the reason for them'

d. Cic. *de orat.* 2,2,33: *sed de me* ***uidero***
'I shall defer the discussion regarding me for the present'

(168) a. Cic. *parad.* 44: *quamuis illa sit plena, dum te inanem* ***uidebo***, *diuitem non* putabo
'although it is full, as long as I see you empty, I shall not consider you rich'

b. Cic. *Att.* 2,11,2: *eo si ante eam diem non* ueneris, *Romae te fortasse* ***uidebo***
'if you do not come to that place before that day, I shall perhaps see you in Rome'

The future perfect maintains a particularly strong position in the colloquial language; it appears more often in Cicero's letters than in his other writings (e.g., (163a), (166c), (167a–b)). There is a rich use of such expressions when Petronius in the first century CE portrays rather vulgar and uneducated speakers in his novel *Satyricon*; they are often used in a way where the absolute-relative function is quite clear (169).[214] However, when he makes the freedmen use the future perfect in expressions meaning 'if he lives' (170a) and 'as long as he lives' (170b), the function is less clear.

(169) a. Petron. 45,10: *sed subolfacio quia nobis epulum* daturus est *Mammea … quod si hoc* ***fecerit***, eripiet *Norbano totum fauorem*
'but my nose prophesies that Mammea is going to offer us a meal; if he behaves so, he will put Norbanus quite in the shade'

b. Petron. 49,6: *postea si* ***fecerit***, *nemo nostrum pro illo* rogabit
'if he does it again, none of us will say a word for him'

214. See Hofmann & Szantyr (1965 § 180.a).

c. Petron. 50,7: ignoscetis *mihi quod* ***dixero****: ego malo mihi uitrea, certe non olunt*
'you will forgive me, if I say that personally I prefer glass; glass at least does not smell'

(170) a. Petron. 46,3: si ***uixerit***, habebis *ad latus seruulum*
'if he lives, you will have a little servant at your side'

b. Petron. 45,9: *itaque* quamdiu ***uixerit***, habebit *stigmam, nec illam nisi Orcus* delebit
'he will be branded as long as he lives, and nothing but death will wipe it out'

In the function 'as long as X lives', Early and Classical Latin seems to prefer the simple future (171); when Cicero uses the future perfect of this verb, the absolute-relative sense seems always quite clear (172). However, in a passage from the later Classical period and in passages from the first centuries CE, the future perfect appears in expressions meaning 'as long as X lives' (173), just as in Petronius (170b).

(171) a. Plaut. *Pseud.* 507–509: *numquam edepol quoiquam* supplicabo, dum *quidem / tu* ***uiues***. *tu mihi hercle árgentum* dabis, */ abs te equidem sumam*
'I'll never go begging to anyone, by Pollux, at least with you alive. By Hercules, you'll give me the money yourself; you're the very man I'll have it from'

b. Cic. *epist.* 6,3,4: *mihi tu, tui, tua omnia maximae curae sunt et,* dum ***uiuam***, *erunt*
'I care for you and your family and all that concerns you and shall do so as long as I live'

c. Sall. *Iug.* 110,4: *arma uiros pecuniam … sume utere, et,* quoad ***uiues***, *numquam tibi redditam gratiam putaueris*
'take arms, men and money, use them, and as long as you live, never think that you are repaid'

(172) Cic. *Mil.* 99: *praeclare enim* ***uixero***, *si quid mihi* acciderit, *priusquam hoc tantum mali* uidero
'life will have been a proud thing for me, if any fate shall come upon me before I see so dire a blow'

(173) a. Sen. *contr.* 2,2,3: *socer – hoc enim te* appellabo, quamdiu ***uixero***
'father-in-law – that is what I will call you so long as I live'
b. Hyg. *fab.* 220,3: *cura quoniam prima eum finxit,* quamdiu ***uixerit*** *Cura eum possideat*
'since Cura made him, Cura shall own him as long as she lives'
c. Quint. *decl. min.* 267,5: *et* quamdiu ***uixero***, *semper hoc animo tota mente* inhaerebit
'and as long as I live, it will stick to my mind'

Other examples of the development toward a more extensive use of the future perfect are provided by the forms *uoluero*, which is never used in Early Latin but which is met with in passages from the early first century onward (e.g., Sen. *contr.* 10,2,1), and *potuero*, which may easily have been confused with *potero* in the manuscript tradition, but which nevertheless seems to become common first from the Classical period onward (e.g., (165c) above).[215] There are thus some changes in the use of the future perfect from Early to later Latin, and in certain cases the use of the future perfect becomes more frequent.

The problem in these cases concerns the extent to which the future perfect in some passages refers to absolute-relative time, and to what extent it has to do with an older aspectual system. There seems to be a degree of overlap between the simple future and the future perfect even when the same kind of actionality is expressed, and even in the same verb. There are also some differences between different authors as regards the use of one form or the other. The tendency to use the future perfect in an absolute-relative sense is particularly strong in Classical Latin, but the system is not totally consistent even there. In my view, this indicates that in Early Latin we sometimes have to reckon with some influence from an earlier system in which the absolute-relative function was not yet as clear as it would be in Classical Latin, and that it is likely that some such influence lived on in fixed expressions in the colloquial language even during the Classical and post-Classical periods.[216]

In the passive voice, there are periphrastic constructions with the perfect participle and forms of *esse* 'to be'. A passage from Cicero indicates that the

215. See Haverling (forthcoming a).
216. See Kühner & Stegmann (1955 § 37.2); cf. Hofmann & Szantyr (1965 § 180.a).

anterior function of the form with *fuero* was felt in certain cases (174a). There is, however, early evidence of a blurring of this system already in Plautus, who uses *ultus fuero* 'I shall have revenged' (174b).[217]

(174) a. Cic. *Q. Rosc.* 3: *quod tibi* ***fuerit persuasum***, *huic* erit persuasum
'what you may have been convinced of, he will be convinced of'

b. Plaut. *Men.* 471–472: *non ergo ego is sum qui sum, / ni hanc iniuriam meque* ***ultus*** *pulchre* ***fuero***
'by heaven, I am not the man I am, if I do not avenge this injury and myself in beautiful style'

There is in Early Latin a similar blurring in the pluperfect between *eram* and *fueram* (cf. (256) below, Section 3.3.3). In Classical Latin, the use of the forms with *fueram* or *fuero* instead of *eram* and *ero* belongs to a somewhat less elegant style.

3.2.3 Indirect future and posteriority

In indirect speech, the posterior sense is expressed by a correspondence of tense between the matrix clause and the subordinate clause. If the matrix clause is in the present or the simple future, the subordinate clause construction has the future participle and the present tense (175), but if the matrix clause is in the past tense, then the subordinate clause has the future participle with an imperfect of *esse* 'to be' (176a–b). In indirect speech in the past tense, the pluperfect subjunctive replaces the future perfect that would be used in direct speech; in such cases the pluperfect subjunctive thus refers to the future (176c).[218]

217. See Kühner & Stegmann (1955 §§ 41.5 Anm. 4c, 44) and Hofmann & Szantyr (1965 §§ 179 Zus. b, 180.b Zus. γ); cf. Hoffmann (1997).

218. See Kühner & Stegmann (1955 §§ 180 (and 180.7), 181, 215.5), Hofmann & Szantyr (1965 § 297.II.B); cf. Pinkster (1995: 125–126, 286) and Binnick (1991: 87). Expression of posteriority is not yet frequent in Early Latin: see de Melo (2007: 57–60, 89).

(175) a. Liv. 37,19,3: quaero *enim … **reditrus**ne extemplo in Italiam **sis***
‘because I ask if you are about to return immediately to Italy’
b. Cic. *inv.* 1,36: considerabuntur … *quid **facturus sit**, quid ipsi **casurum sit**, qua **sit usurus** oratione*
‘it will be considered what he is going to do, what is going to happen to him, what language he is going to use’

(176) a. Liv. 28,45,4: *non ego ignarus quid **responsurus facturus**ue **esses*** quaesiui
‘I did not ask you because I did not know what you would answer or do’
b. Cic. *Flacc.* 33: *Flaccus quid alii postea **facturi essent*** scire non poterat, *quid* fecissent *uidebat* …
‘Flaccus could not know what the others were going to do afterwards, but he did see what they had already done’
c. Caes. *civ.* 1,26,4: *ad eum* (Caesarem) *legati uenerunt, qui se ea quae **imperasset**, facturos pollicerentur*
‘envoys came to Caesar, who promised to do whatever he would command’

Being a “principal tense”, the simple future is normally followed by the principal tenses in the system of sequence of tenses: that is, by the present, perfect, or periphrastic future with a present of *esse* ‘be’ (176b).

The *posterior* sense is also expressed by the future infinitives and participles. Of transitive verbs – and also of several intransitive ones – there is one active (*uocaturus esse* ‘be about to / be going to call’) and one passive future infinitive (*uocatum iri* ‘be about to / be going to be called’). The future participle has an active function and indicates *posterior* action, of transitive (*uocaturus* ‘about to call’) as well as intransitive verbs (*moriturus* ‘about to die’). Examples of the future participle in constructions without a form of *esse* are rare in the earlier periods, and their number grows in the early Empire. In the Early and Classical periods, the future participle is mostly found in periphrastic constructions; it indicates intention (177a), destiny (177b), or immediate future (177c). Due to the rather strong Latin tendency to emphasize tense relations, a construction with the future infinitive is used after a

verb meaning ‘hope, expect’ (178). The future participle with *fuisse* occurs in indirect conditional clauses indicating counterfactuality in the past (179).[219]

(177) a. Plaut. *Pseud.* 82: *ille* ***abducturus est*** *mulierem* cras
‘and tomorrow that man will take away my girl’
b. Sall. *Iug.* 35,10: *urbem uenalem et mature* ***perituram***
‘a city for sale and doomed to speedy destruction’
c. Suet. *Claud.* 21,6: *haue imperator,* ***morituri*** *te salutant!*
‘hail Caesar, those who are about to die salute you!’

(178) a. Caes. *Gall.* 7,26,2: *id . . . sese* ***effecturos*** sperabant
‘they expected that they would do it’
b. Cic. *Sull.* 21: *quem defendis,* sperat se ***absolutum iri***
‘the one whom you defend hopes to be acquitted’

(179) Cic. *fat.* 6: *puto enim,* etiamsi *Icadius tum in spelunca* non fuisset, *saxum tamen illud* **casurum fuisse** . . .
‘because I believe, that even if Icadius had not then been in the cave, that stone would have fallen’

In indirect speech after past tense verbs, posterior actions are often indicated by phrases introduced by expressions like *fore ut* or *futurum esse ut* followed by the imperfect subjunctive (180a). This construction is often met with in potential conditional clauses in indirect speech (180b).[220]

(180) a. Caes. *Gall.* 1,31,11: (dixit) ***futurum esse*** *paucis annis,* ***uti*** *omnes ex Galliae finibus* pellerentur
‘he said that within a few years they would all be driven out of Gaul’

219. See Kühner & Stegmann (1955 §§ 126.2 Anm. 1, 136.c, 138.3, 139, 215.5), Hofmann & Szantyr (1965 §§ 175.a, 208); and Laughton (1964: 118–124); cf. Pinkster (1995: 305–306), Binnick (1991: 96), and Comrie (1985: 60–61).
220. See Kühner & Stegmann (1955 § 127.8), Hofmann & Szantyr (1965 §§ 208.b Zus. β, 211.b); cf. Moralejo (1998).

b. Sall. *Iug.* 61,5: (fides data est) *si Iugurtham uiuom aut necatum sibi* tradidisset, ***fore ut*** *illi senatus inpunitatem et sua omnia* concederet
'his word was pledged that if he delivered to him Jugurtha, alive or dead, the senate would grant him impunity, and all that was his'

An interesting development of the use of the imperfect subjunctive in references to posterior actions in consecutive and final clauses is the "prospective subjunctive", of which there are only a few examples from the Classical period. Caesar preferred the construction with *fore ut* or *futurum esse ut*, as in (180a), but his officer Hirtius, who wrote the eighth book of *The Gallic Wars*, used the construction with the imperfect subjunctive in (181).[221]

(181) Hirt. *Gall.* 8,2,54: *C. Curio … saepe erat senatui pollicitus, si quem timor armorum Caesaris laederet, et quoniam Pompei dominatio atque arma non minorem terrorem foro inferrent,* ***discederet*** *uterque ab armis exercitusque* ***dimitteret****; fore eo facto liberam et sui iuris ciuitatem*
'C. Curio had often promised the senate that if the fear of Caesar's arms would harm anyone, and since Pompey's power and weapons brought no less threat to the republic, both would abandon the weapons and send away their armies; in that way the republic would be free and master of itself'

In later Latin, the number of examples in which the imperfect subjunctive refers to posterior actions grows ((215)–(216) below. Section 3.2.5).

3.2.4 Modality and future

In the earlier periods, the present imperative looks forward to immediate fulfilment, whereas the future imperative, formed with the ending *-tōd*, looks forward to contingent fulfilment, as indicated by passages in which both imperatives occur together ((182a); (111) above, Section 3.1.1) or in which the future imperative occurs with expressions indicating future (182b); the future

221. See Fridh (1971: 14–18).

imperative is particularly frequent in laws and prescriptions of various kinds (182c).[222]

(182) a. Ter. *Hec.* 443: *maneamne usque ad uesperum?* :: ***maneto***, ***curre***
'shall I stay till the evening? :: stay then, now run!'

b. Plaut. *Amph.* 501: *uerum quod erit natum,* ***tollito***
'the child which will be born, lift it up'

c. Cic. *leg.* 3,8: *regio imperio duo* **sunto**; *iique … a consulendo consules* ***appellamino***. *Nemini* **parento**; *ollis salus populi suprema lex* ***esto***
'there shall be two officers with royal power; they shall be called consuls; they are to obey no one; to them the welfare of the people must be the paramount law'

Such forms as *rogato* and *iubeto* are still in use in Early and Classical Latin, but they become scarcer in the later periods; *esto* and *sunto* are more frequent in all periods but seem archaic when they occur in the later periods.

The temporal reference of the perfect subjunctive is often to the past, for instance in consecutive clauses (as in (231a) below, Section 3.3.1). In conditional clauses, however, the perfect subjunctive expresses possibility, and in such cases it often implicitly refers to the future (183), a circumstance which made some scholars regard some such examples as representing a subjunctive of the future perfect.[223] However, in this function the perfect subjunctive seems related to the use of the old sigmatic optative in Early Latin (184). The use of these forms corresponds both to the use of the present subjunctive (185a) and to the use of the perfect subjunctive (185b).[224]

222. See Kühner & Stegmann (1955 § 50), Hofmann & Szantyr (1965 §§ 187, 188); cf. Pinkster (1995: 260–262).

223. So, e.g., Madvig (1894 §§ 379–380); on the perfect subjunctive cf., e.g., Pinkster (1995: 250, 256–258, 302).

224. See Haverling (2005d); cf. de Melo (2007: 191–215).

(183) Plaut. *Cas.* 424–426: *si nunc me* suspendam *meam operam* ***luserim*** */ et praeter operam restim sumpti* ***fecerim*** */ et meis inimicis uoluptatem* ***creauerim***
'if I were to hang myself now, I would thereby lose (have lost) the labor (that I have put into this matter), I would be put to the expense of buying a rope and I would have given my enemies a charming treat'

(184) a. Ter. *Ad.* 896: *lubens bene* ***faxim***
'I would be glad to do it'
b. Plaut. *Asin.* 503: *haud* ***negassim***
'I would hardly deny it'

(185) a. Plaut. *Cas.* 607: *quin* ***faciam*** *lubens*
'and I would be glad to do it'
b. Liv. 30,30,27: *haud* ***negauerim***
'I would not deny'

There often seems to be an overlap between this potential use of the perfect subjunctive ((186a), (187a), (188a)) with the potential use of the present subjunctive ((186b), (187b)) or even of the simple future ((186c), (188b)). This phenomenon occurs with particular frequency with verbs of saying: of the verb *dico* 'say', Cicero uses the perfect subjunctive in this function ((186a), (188a)) and occasionally the simple future (186c), but he uses the present subjunctive of other verbs, among them *nego* 'deny' (187b). Livy has the present subjunctive of *dico* 'say' in this function (186b).[225] There is, however, no total interchangeability in all constructions; the idiomatic expression is *pace tua dixerim* 'I would say so, if you allow me' (188a), with the perfect subjunctive; and in the only example with *dicam* there is an instance of a simple future (188b).[226] Past, present, as well as future tenses occur in expressions

225. See Kühner & Stegmann (1955 § 46.1–2) and Hofmann & Szantyr (1965 §§ 174.b, 185.IV.a); cf. Pinkster (1995: 250, 294, 302). Bennett (1910: 202–203, 205–207) found that the original opposition between a "non-continuing" (= perf. subj.) and "continuing" (= pres. subj.) still holds in his ca. 35 instances from Early Latin and that the present subjunctive sometimes functions as a "may" potentialis and as a "can" potentialis in Latin.
226. So Pinkster (1995: 252, 252 n. 19).

indicating epistemic possibility and probability and in implicit references to the future in the languages of the world.[227]

(186) a. Cic. *Cato* 8: *sed fortasse* ***dixerit*** *quispiam tibi propter opes ... tolerabiliorem senectutem uideri*
'but perhaps someone will say that old age seems more bearable to you who have money and resources'

b. Liv. 5,52,5: *forsitan aliquis* ***dicat*** *... Veis ea nos facturos*
'perhaps someone may say that we shall do these things at Veii'

c. Cic. *Sull.* 84: *'hoc tibi sumis'* ***dicet*** *fortasse quispiam, 'ut ... innocens iudicetur?'*
'perhaps someone will say, "do you arrogate to yourself the claim that a man should be acquitted?"'

(187) a. Cic. *rep.* 3,45: *ac nullam quidem citius* ***negauerim*** *esse rem publicam quam istam*
'there is no governnment to which I would more quickly deny the title of commonwealth, than that one'

b. Cic. *Lael.* 10: *ego si Scipionis desiderio me moueri* ***negem****, quam id recte faciam,* uiderint *sapientes; sed certe mentiar*
'if I were to deny that I am missing Scipio, the wise men may see how rightly I would do it; but I would certainly be telling a lie'

(188) a. Cic. *Tusc.* 5,12: *cuius ego iudicium,* pace tua ***dixerim***, *longe antepono tuo*
'whose judgement I, by your leave, put by far before yours'

b. Cic. *Marcell.* 4: *tamen adfirmo et hoc* pace ***dicam*** tua, *nullam in his esse laudem ampliorem quam eam quam hodierno die consecutus es*
'and yet I assure you and will tell you, by your leave, that there is no greater glory in these matters than the one you have acquired today'

227. See Bybee, Perkins, and Pagliuca (1994: 206–208).

In certain cases in Classical Latin, the presence of a negation seems to favor the use of the perfect rather than the present subjunctive in the potential function. In an expression meaning ‘I would not deny’, Plautus used the sigmatic optative (184b); the corresponding expression in Classical Latin is *haud negauerim* or *non negauerim* ((185b), (187a)). Of the 26 examples of *negauerim* met with in the texts written before about 200 CE, 25 occur with a negation. There is a similar tendency to use the perfect subjunctive in expressions like *haud facile dixerim* ‘I would not easily tell’ (e.g., Cic. *rep*. 1,6,6).[228]

According to the traditional description of the school-grammars, in prohibitions the perfect subjunctive has a more specific function that points to a particular situation (189) and the present subjunctive is more general and points to a principle (190).[229] Sometimes this seems to be the system, but in other cases – and especially in Early Latin – it is more difficult to detect a clear functional difference between the perfect subjunctive (189b) and the present subjunctive (191a). The perfect subjunctive in this function is mostly met with in the second person, whereas the third person usually has the present subjunctive (191b).[230]

(189) a. Liv. 21,44,6: *ne **transieris** Hiberum!*
‘do not cross the Ebro!’

b. Cic. *parad.* 41: *tu posse te dicito, quoniam quidem potes, debere ne **dixeris**, quoniam nihil quisquam debet*
‘say that you can, since you can, but do not say that you must, because nobody must anything’

c. Plaut. *Epid.* 148: *quid tu nunc? patierin ut ego me interimam?* :: ***Ne feceris***
‘what then? Will you suffer me to destroy myself? :: Don’t do it’

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228. See Haverling (2005d: 81–83).

229. So Kühner & Stegmann (1955 § 47.8–9) and Gildersleeve & Lodge (1895 § 263). Hofmann & Szantyr (1965 § 186.III Zus. β) point to the historical background and observe that of a verb which has two perfect tense forms, it is the sigmatic form that occurs in this construction (*ne parseris* ‘do not spare’ in Plaut. *Poen*. 993); cf. Haverling (2002: 159).

230. See Bennett (1910: 167–174) and Pinkster (1995: 257, 261–262); cf. Handsford (1947: 46–47), Grassi (1966: 220–224), and de Melo (2007: 92–132).

(190) a. Cic. *Cato* 33: *isto bono utare, dum adsit, cum absit,* ne ***requiras***
'you must enjoy that blessing so long as it is there, when it is gone you must not pine for it'

b. Varro *rust.* 1,35,2: *uineas arbustumque putare, dum in XV diebus ante et post brumam, ...* ne ***facias***
'do not prune vines and plantation during the fifteen days before and after the winter solstice'

(191) a. Plaut. *Aul.* 173–174: *uerba* ne ***facias***, *soror. / scio quid dictura es*
'now, do not say anything, sister. I know what you are about to say'

b. Ter. *Haut.* 30: ne *ille pro se dictum* ***existumet***
'he must not believe that it was said for him'

Early Latin has examples of the old optative, such as *faxim* 'I might do' (192a) and *dixis* 'you may say' (192b), which historically are connected with the aorist in Proto-Indo-European and which are generally interpreted as functionally corresponding to the perfect subjunctive in the texts.[231] Some forms in which the original *-s-* has been rhotacized, such as *siris* 'you may let' (193a) and *adiuuerit* 'he may help' (193b), belong to this category too (cf. (164) above, Section 3.2.2). These old aorist optatives occur as parallels to old "sigmatic" futures formed according to the same pattern, such as *seruassis* 'preserves' (193a).[232] In Classical Latin these forms are archaic, with the exception of *ausim* 'I might dare' (194).

(192) a. Plaut. *Aul.* 148–150: *liberis procreandis / – ita di* ***faxint!*** *– uolo te uxorem / domum ducere*
'in order to have children – may the gods grant that this happen! – I want to marry you and bring you home'

b. Plaut. *Asin.* 839: *ne* ***dixis*** *istuc*
'do not say that!'

231. See Bennett (1910: 191–196), Hofmann & Szantyr (1965 §§ 185.I, 186.III), Leumann (1977 §§ 450, 451), and Rix (1998: 623); cf. Kühner & Stegmann (1955 §§ 37.2, 6, 47.9).

232. See Rix (1998: 624–625); cf. de Melo (2007: 195–197, 201–206).

(193) a. Cato *agr.* 141,2: *te precor . . . , utique fruges . . . bene euenire* ***siris***, *pastores . . .* seruassis
'I pray to you that you let the crop grow well, that you preserve the herdsmen'

b. Plaut. *Rud.* 305: *nunc Venerem hanc ueneremur bonam, ut nos lepide* ***adiuuerit*** *hodie*
'now we will pray to our good Venus, that she help us well today'

(194) Cic. *Brut.* 18: *non mehercule, inquit, tibi repromittere istuc quidem* ***ausim***
'by Hercules, he said, I would not dare promise you that!'

The function of these old forms in the aorist optative often corresponds to the perfect subjunctive (cf. (184b) and (185b); and (192b) and (189b)) but sometimes to the present subjunctive (cf. (184a) and (185a)).

3.2.5 The development

In later Latin, the most important changes in the Latin system of tenses in the infectum affects the simple future. Various expressions which used to have a modal force tend to be used in a future sense, thus replacing the simple future. One such element is the old construction with the future participle; in the Vulgate the usage is not quite clear in this respect and sometimes the periphrastic form is found (195a), sometimes the old synthetic form (195b); in the latter there is an example of the tendency to use the present subjunctive instead of the future perfect in clauses introduced by the conjunction *priusquam* 'before' ((163b), (164b) above, Section 3.2.2). There is also a growing number of examples of the construction with the gerundive in the sense 'shall'; in (196a) the construction *esse inueniendum* replaces the passive future infinitive *inuentum iri*, and in (196b) the future sense is strengthened by a future form of *esse*.[233]

233. See Hofmann & Szantyr (1965 § 175.a & b), Väänänen (1981 § 303), and Stotz (1998–2000, 4 § 60); cf. Coleman (1971), Pinkster (1985, 1987, 1989). Kooreman (1995) found that the gerundive regularly occurs within deontic modality, that its source is frequently the writer, and that the illocutionary force may be assertive (normal or metadirective), directive, or commissive.

(195) a. Vulg. *Marc.* 14,30: *in nocte hac* priusquam *bis gallus uocem* ***dederit*** *ter me* ***es negaturus***
'in this night before the third cock-crow you will deny me three times'

b. Vulg. *Marc.* 14,70: *et recordatus est Petrus uerbi quod dixerat ei Iesus:* priusquam *gallus* ***cantet*** *bis ter me* ***negabis****; et coepit flere*
'and Peter remembered what Jesus had told him, that he would deny him three times before the second cock-crow, and he burst into tears'

(196) a. Tert. *praescr.* 11,2: *spero utique aliud* ***esse inueniendum***
'I hope at any rate that something else will be found'

b. Filastr. 150,9: *conuenit cognoscere quod alii in regno, alii in paradiso, alii in uitam atque remissionem peccatorum in futuro* ***erunt deputandi***
'it is suitable to know that in the future some will be destined to the kingdom, others to paradise, others to life and the remission of sins'

Other important constructions indicating future are with *incipio* or *coepi* 'begin' ((197a), (198a)) and *uolo* 'want' (199a). These new constructions are more often found in less elegant Late Latin texts such as certain translations of the Bible ((197a), (199a)) or certain handbooks of a technical nature (198a), whereas more literary texts such as the Vulgate translation of the Bible and more literary Late Latin authors prefer other constructions, such as the periphrastic future ((197c), (199b)) or the future perfect (198b). A construction with *possum* 'be able to' often replaces expressions in the subjunctive indicating future (200).[234]

(197) a. Vet. Lat. codd. 2, 50, 76 *act.* 26,23: *lumen* ***incipiet*** annuntiare

b. NT *act.* 26,23: εἰ πρῶτος … φῶς μέλλει καταγγέλλειν

c. Vulg. *act.* 26,23: *si primus … lumen* ***adnuntiaturus est***
'if he as the first will announce the light'

234. See Hofmann & Szantyr (1965 § 175.c, d & e), Väänänen (1981 § 303), and Stotz (1998–2000, 4 § 61.6).

(198) a. Chiron 65: *fibulas non rumpes, nisi iam glutinabit et cicatrix* ***esse coeperit***
'you will not take away the clasps, unless the wound is already closing up and will have cicatrized'

b. Veg. *mulom*. 2,15,2: *non prius fibulas ablaturus, quam* ***duxerit*** *cicatricem*
'not taking away the clasps before it has scarred over'

(199) a. Vet. Lat. codd. 2, 50, 76 *act.* 20,13: ***uolentes*** *suscipere* (NT *act.* 20,13: μέλλοντες ἀναλαμβάνειν)

b. Vulg. *act.* 20,13: *nos autem praecedentes naui enauigauimus in Asson, inde* ***suscepturi*** *Paulum*
'but going ahead to the ship, we set sail for Assos, intending to take Paul aboard there'

(200) *Hist. Aug.* 1,16,7: *mathesin sic scire sibi uisus est, ut sero kalendis Ianuariis scripserit, quid ei toto anno* ***posset euenire***, *ita ut eo anno, quo perit, usque ad illam horam, qua est mortuus, scripserit quid* acturus esset
'he thought he knew astrology so well, that he wrote late on the first of January, what would happen to him during that whole year, so that in the year in which he died, he had written what he would do until the hour of his death'

Of particular importance are the new constructions with *debeo* 'shall' (201) and with *habeo* 'have' (202). In Late Latin, *debeo* is sometimes used instead of a construction with the future participle (201a) or as a modal auxiliary (201b); in Sardinian only, the construction with *debeo* is the origin of the new future.[235]

(201) a. Greg. Tur. *Franc.* 3,7: *in campum enim, quo certamen agi* ***debebant***, *fossas effodiunt*
'in the field where they were about to fight, they dig ditches'

235. See Hofmann & Szantyr (1965 § 175), Väänänen (1981 § 303), and Stotz (1998–2000, 4 § 61.7); cf. Bonnet (1890: 691–693) on *debeo* as a modal auxiliary (e.g., *Franc*. 4,45: *Mummolum elegant qui has urbes . . . reuocare deberet* and *Franc*. 2,32: *ut . . . tributa . . . reddere debeat iubet*).

b. Greg. Tur. *Franc.* 3,9: *Archadius … Childebertum inuitat, ut regionem illam* ***deberet*** *accipere*
'Archadius invited Childebert to take over that region'

The most important constructions replacing the future, however, were those with *habeo* 'have'; this is the background of the synthetic futures of many of the Romance languages. This construction often replaces the passive future infinitive in *-tum iri* (202b–c) or the future participle ((202a), (202d)), but it may also be found in conditional clauses and it then comes close to the function of the conditional mood of the Romance languages which developed out of this construction (202e). The construction is often found with passive infinitives (202f). Sometimes they seem to have not only a future but also a deontic function, as in (202d–e), but in other cases it seems instead to indicate predestination (202f). Although the first examples occur already around 200 CE and although the future development implies that this construction was very frequent in the colloquial language, examples are remarkably rare in literary Late Latin and the phenomenon is mostly met with in rather vulgar texts. The *Vetus latina* translations of the Bible often have the construction with *habebam* (203a) where the *Vulgate* has the periphrasis with the future participle (203b).[236]

(202) a. Tert. *adv. Marc.* 4,40: *qui, tamquam ouis ad uictimam* ***adduci habens*** *et tamquam ouis coram tondente sic os non* aperturus
'he, who like a sheep about to be brought to sacrifice and like a sheep that while being shorn is not going to open its mouth'

b. Tert. *anim.* 35,1: *totiens animam* ***reuocari habere***
'that the soul will be summoned back so many times'

236. See Hofmann & Szantyr (1965 § 175.g) and Stotz (1998–2000, 4 § 62.1); cf. Löfstedt (1933: 63–73); and Kiss (1982: 58–60). As for the construction with *habere* + infinitive, Kooreman (1995) found that it overlaps with *-urus esse*, and to a certain extent also with the gerundive, but in her material its source is never the writer and the illocutionary force is never commissive. The periphrases with ὀφείλω 'owe, ought', μέλλω 'intend', and ἔχω 'have' and the infinitive, which replaced the synthetic future in Ancient Greek, started with passive infinitives too; they were eventually replaced by the construction with θέλω 'wish': see, e.g., Horrocks (1997: 66, 76).

c. Porph. *Hor. epist.* 2,1,17: *nil oriturum a. Et hoc splendidius quam si '**nasci habere**' uel 'natum esse' dixisset*
"'nothing will come from". And this is better than if he had said "be about to be born" or "be born"'

d. *Itin. Eger.* 2,1: *ipsam ergo uallem nos **trauersare habebamus**, ut possimus montem ingredi*
'for we had to cross that valley to be able to enter the mountain'

e. Aug. *in psalm.* 21,2,28: *si* diceret *fines terrae, et non* diceret *uniuersi fines terrae, **dicere habebant***
'if he said the limits of the earth, and not all the limits of the earth, they would have to say'

f. Tert. *adv. Marc.* 5,13,3: *ergo et ueritas eius erit cuius et ira quae **reuelari habet** in ultionem ueritatis*
'then the truth will belong to him whose is also the wrath which is to be revealed to avenge the truth'

(203) a. Vet. Lat. *Luc.* cod. 5 19,4: *quia inde **habebat transire***
b. Vulg. *Luc.* 19,4: *quia inde **erat transiturus***
'for he was to pass that way'

The colloquial character of the construction is underlined by the fact that the only example of it in Gregory of Tours in the late sixth century is found in a passage of conversation ((204); cf. his use of the new periphrastic perfect with *habeo* in such contexts in (154a) and (154c) above, Section 3.1.5). What appears to be the first example of the new synthetic future formed from this construction and found in most Romance languages, *daras* 'you shall give', occurs in a conversation in Fredegar's *Chronicle* from the seventh century (205).[237]

237. See Bonnet (1890: 690) and Norberg (1975: 95). On the construction *cantare habeo*, cf. also Hopper and Traugott (2003: 52–55, 62).

(204) Greg. Tur. *Mart.* 1,16: *dicit sanctus ad illam: 'In Gallias* ***habui*** *iam* ***redire****, sed propter istum qui foris iacet in atrium me remoratum profiteor'*
'the holy man said to her: "I was already going to go back to Gaul, but I confess I stayed in the atrium because of him who is lying outside"'

(205) Fredegar *chron.* 2,62 p. 85: *et ille respondebat: 'Non* dabo*'. Iustinianus dicebat. '***Daras***'. Ob hoc loco illo, ubi haec acta sunt, ciuetas nomen Daras fundata est iusso Iustiniano, quae usque hodiernum diem hoc nomen nuncopator*
'and he answered: "I shall not give". Iustinian said: "*Daras* = you shall give". And because of this in the place, where this happened, a town was founded at Iustinian's order with the name of Daras, which to this day is called by this name'

Vulgar Late Latin, in other words, seems to be experimenting with several of the known pathways for creating new futures, such as expressions of desire (*uolo* 'want' in (199)), ability (*possum* 'be able to' in (200)), or obligation (the gerund in (196) and *debeo* 'shall' in (201)).[238] Traditionally the original function ascribed to the *habeo* + infinitive construction is deontic,[239] but in the earliest instances it indicates ability (e.g., Cic. *epist.* 1,5a,3: *habeo polliceri* 'I can promise') and in the Late Latin material the deontic function does not seem to be the most important, and often the sense seems to be to indicate predestination, much like the English 'be to do' construction.[240]

The prohibitive and potential functions of the perfect subjunctive tend to be replaced by the present subjunctive in the later periods of Latin. The construction represented by *ne hoc feceris* 'don't do this!', which is quite frequent in Classical Latin, loses ground in Late Latin, and in the Vulgate the corresponding use of the aorist in Greek may be translated by the present subjunctive (206a).[241] The use of constructions like *ne dixeris*, however, remains

238. See Bybee, Perkins, and Pagliuca (1994: 251–254).
239. So Hofmann & Szantyr (1965 § 175.g).
240. See Benveniste (1968) and Bybee, Perkins, and Pagliuca (1994: 261–264); cf. Kooreman (1995: 386–387).
241. See Ernout & Thomas (1953 § 251.II.B.1) and Hofmann & Szantyr (1965 § 186.III).

rather frequent in literary Late Latin, where it does not seem to differ semantically from the constructions with the present subjunctive like *ne dicas* (206b). The perfect subjunctive in expressions like *fortasse dixerit quispiam*, which appears, for instance, in Cicero ((186a) above, Section 3.2.4), is replaced in Late Latin by the present subjunctive, *fortasse dicat* (207).[242]

(206) a. Vulg. *Marc.* 10,19: *ne* ***adulteres***, *ne* ***occidas***, *ne* ***fureris***
(NT *Marc.* 10,19: μὴ φονεύσῃς, μὴ μοιχεύσῃς, μὴ κλέψῃς)
'do not kill, do not commit adultery, do not steal'

b. Aug. *spec.* 23: non sequaris *concupiscentiam cordis et* ne ***dixeris****: 'quomodo potui?'* … ne ***dixeris****: 'peccaui et quid accidit mihi triste?'* … *et* ne **dicas***: 'miseratio dei magna est, multitudinis peccatorum meorum miserebitur'*
'do not follow your heart's desire and do not say "how could I?" and do not say "I have sinned and what bad thing happened to me?" and do not say: "God's compassion is great; he will have pity on my numerous sins"'

(207) a. Lact. *inst.* 1,15,21: *fortasse* **dicat** *aliquis prae nimio luctu delirasse Ciceronem*
'perhaps someone will say that Cicero was out of his mind overhelmed by grief'

b. Ambr. *in psalm.* 118 *serm.* 20,7: *fortasse* **dicat** *aliquis: 'gloriatur de se propheta'*
'perhaps someone will say "the prophet boasts of himself"'

Late Latin is generally less sensitive to the relative sequence of events and situations than Early and Classical Latin, but in certain cases there is an increase in the use of the future perfect after the Classical period. In an expression meaning 'I shall care for you as long as I live', Cicero has the simple future in the *dum*-clause meaning 'as long as I live' ((171b) above, Section 3.2.2); but the elder Seneca and some other authors from the first century CE or later have the future perfect in this function ((173) above, Section 3.2.2). Late Latin normally has the present indicative in this function (208a); there are, however, a few examples of the future perfect too, but, as

242. See Hofmann & Szantyr (1965 § 185.IV.a).

indicated by (208b), the perfect sometimes seems to replace the future perfect to indicate past events in the future.

(208) a. Aug. *in psalm.* 36 *enarr. serm.* 1,11: faciam *quidquid uolo* quamdiu ***uiuo***, *postea non* ero
'I will do whatever I want to as long as I live, afterward I will not be'

b. Conc. *Agath.* a. 506 p. 225: *si episcopus, presbyter aut diaconus crimen capitale* **commiserunt**, *aut cartam* ***falsauerint***, *aut testimonium falsum* ***dixerint***, *ab officii honore depositi in monasterio* retrudantur, *et ibi tantummodo,* quamdiu ***uixerint***, *laicam communionem* accipiant
'if a bishop, clergyman, or deacon have committed a capital crime, or falsified a document or given false testimony, they shall be deposed from their offices and be sent to a monastery, and there they shall, as long as they live, receive the Holy Communion as the laymen do'

The future perfect is still rather common in Late Latin, but, as indicated by (195b), there is now a growing tendency to use the present subjunctive instead, for instance in the constructions with *priusquam* 'before'. As a result, the old forms are not always used in the same way as before.[243] An example is the tendency to use *uidero* with an indirect question in the sense 'I leave aside, I shall not discuss' (209). In the old function 'I shall have a look at it later' ((167) above, Section 3.2.2), Late Latin has the simple future (210).

(209) a. Symm. *rel.* 3,10: ***uidero*** quale sit *quod instituendum putatur*
'I shall leave aside what it is that they want to introduce'

b. Ambr. *exc. Sat.* 2,131: *sed* ***uidero*** quid *uos de uobis, gentes,* opinionis habeatis
'I shall leave aside what opinion you have of yourselves, you pagans'

243. See Hofmann & Szantyr (1965 § 180 Zus. γ).

(210) a. Quint. *decl. min.* 275,2: Postea ***uidebo*** *qua causa dimissus sit;* interim *nego hoc esse pecuniam accipere*
'I shall later discuss for what reason he has been discharged; meanwhile I deny that this is receiving money'

b. Aug. *fid. et op.* 12,18: *unde* mox ***uidebo***, *si deus iuuerit,* quid *secundum scripturas sentiendum sit*
'therefore I shall soon discuss, if God helps me, what we have to think according to the scriptures'

The perfect subjunctive and the future perfect differed only in the first person singular, and, as indicated by a passage in Gellius in the second century CE, there was soon some uncertainty about the difference between the two forms (211).[244]

(211) Gell. 18,2,14: *postrema quaestionum omnium haec fuit: '**scripserim**', '**legerim**', '**uenerim**' cuius temporis uerba sint, praeteriti an futuri an utriusque*
'the last question was this one: what is the tense of *scripserim*, *legerim*, and *uenerim*, whether they are pasts or futures or both'

Although the old tense forms are still rather frequent in literary Late Latin, there are thus minor changes in the ways in which they are used.

With regard to the complicated system of the sequence of tenses of Classical Latin, the authors of literary Late Latin generally respect these rules, whereas there is a certain lack of precision as regards these matters in vulgar Late Latin. However, as a result of the tendency to use the perfectum instead of the infectum in periphrases ((270)–(275) below, Section 3.3.5) the *-urum fuisse* infinitive is sometimes found even in Augustine (212a) in cases where Classical Latin had the construction with *-urum esse* ((180) above, Section 3.2.3). But Augustine also uses the *-urum fuisse* construction according to the rules of Classical Latin, for instance in an unreal conditional clause in a dependent position ((212b); cf. (179) above, Section 3.2.3); this construction seems, however, to become relatively rare in the later periods.[245] After a verb

244. See Ernout & Thomas (1953 § 268) and Hofmann & Szantyr (1965 § 180 Zus. β); cf. Kiss (1982: 63–64); cf. also Thomas (1938b: 188).
245. I have found very few examples in the *CLCLT-5*.

like *spero* 'hope, expect', Augustine uses the future infinitive (or participle) according to the classical rules in the active (213a) and in the passive voice (213b), but the sixth-century translation of Josephus has the present infinitive instead (214).

(212) a. Aug. *civ.* 17,5: *de huius* (Aaronis) *ergo stirpe isto loco dixit* ***futurum fuisse***, *ut non* essent *ulterius sacerdotes*
'and of his family he then said that they would no longer be priests'

b. Aug. *conf.* 6,16: *et* disputabam *cum amicis meis Alypio et Nebridio de finibus bonarum et malorum, Epicurum* ***accepturum fuisse*** *palmam in animo meo,* nisi *ego* credidissem *post mortem restare animae uitam*
'and I used to argue with my friends Alypius and Nebridius about the supreme good and the supreme evil and I used to say that Epicurus would have received the prize palm from me, had I not been convinced that the life of the soul would continue after death'

(213) a. Aug. *epist.* 62,1: *quem tecum* futurum ***sperabant***
'whom they hoped would be with you'

b. Aug. *epist.* 28,4: *quod Domino adiuuante* prosperatum iri ***spero***
'which I hope will be (made) successful with the Lord's help'

(214) Joseph. *antiq.* 3,2,3 (48): ***sperabant****que aliquando a malis huiusmodi* liberari, *iubebantque Moysen ut ad bella praeiret*
'and they hoped they would some day be freed from this kind of evil and they told Moses to go before the others to the war'

Already in Classical Latin there are a few examples in which the imperfect subjunctive refers to the future ((181) above, Section 3.2.3), and in later Latin the number of such examples grows. In the Vulgate the prospective imperfect subjunctive and the periphrastic construction may be found in what appears to be the same semantic function (215). Often clauses with a conjunction and the prospective imperfect subjunctive replace the accusative with the future infinitive, as in (216a), where *ut audiremur* corresponds to *nos auditum iri*,

and in (216b), where *daret* corresponds to *se daturum esse*.[246] The sequence of tenses is not always consistent within the same passage, as in (217), where the imperfect tense *permutaretur* and the present tense *transferatur* refer to the same action.[247]

(215) a. Vulg. *Matth.* 24,43: *si sciret pater familias, qua hora fur* ***uenturus esset****, uigilaret*
'if the householder had known in what part of the night the thief was coming, he would have watched'

b. Vulg. *Luc.* 12,39: *si sciret paterfamilias, qua hora fur* ***ueniret****, uigilaret*
'if the householder had known at what hour the thief was coming, he would have watched'

(216) a. *Pass. Perp.* 5,1: *post paucos dies rumor cucurrit, ut* ***audiremur***
'after a few days there was a rumor saying that we would be interrogated'

b. Ambr. *off.* 1,50,204: *Herodes, qui iurauit quoniam quidquid* petitus esset, ***daret*** *filiae Herodiadis*
'Herod, who swore that whatever he had been asked to give, he would give it to Herodiades' daughter'

(217) Iulian. *dig.* 23,4,21: *nam constat posse inter uxorem et uirum conueniri, ut dos, quae in pecunia numerata esset,* ***permutaretur*** *et* **transferatur** *in corpora, cum mulieri prodest*
'because it is clear that wife and husband may agree to transfer the dowry, the sum of which had been defined in money, to living beings (i.e., slaves), if that is an advantage to the woman'

Fredegar's *Chronicle* from the seventh century has an example where the construction with the indicative and the subjunctive of the imperfect tense is used in a hypothetical conditional clause, referring to a potential future like the

246. See Fridh (1971: 29, 34–38); Fridh considered the reading *ut audiremur* to be the correct one and the reading *quod audiremur* to be a later normalization; the Greek translation has μέλλειν ἡμᾶς ἀκουσθήσεσθαι.

247. See Hofmann & Szantyr (1965 § 297.II.B.d); cf., e.g., Garvin (1946: 71).

present subjunctive (218a); in (218b) the same construction appears in indirect speech, where Classical Latin would have the imperfect subjunctive in the protasis and a construction with the future infinitive in the apodosis.[248] The use of the imperfect subjunctive in this function occurs already in Ambrose in the late fourth century (216b).

(218) a. Fredegar *chron.* 2,62 p. 87: *'si* ***iubebas*** *… armati* ***accederemus*** *ad prilium;* ***cognuscebas****, cui ex nobis sit utelitas an ignauia'*
"'if you would order it, I would put on my arms and start combat; you would know who of us is of any use and who is not'"

b. Fredegar *chron.* 2,53 p. 73: *petens auxiliare contra Chunis: si* ***praeualebat*** *resistere, mediam partem Galliae Gothis* ***daret***
'asking for help against the Huns he said that if he would be able to resist them, he would give half of Gaul to the Goths'

The way to express potentiality and counterfactuality in the past is thus changing in later Latin, and the new periphrastic expressions like *dicere habebant* (202e) play an important role in this development which would eventually give the Romance languages a new synthetic mood, the conditional (cf. **si iubebas, darebam*).[249]

3.3 The past

3.3.1 The past tenses: The perfect and the imperfect

The imperfect and the perfect when used as a past tense both refer to past situations and events. The Latin imperfect indicative is the result of a process of grammaticalization, in which a periphrastic expression which probably had a

248. See Stotz (1998–2000, 4 § 58.2), Sabanééva (1996: 141), and Lagerqvist (2005); on the connection between the imperfective viewpoint and the irrealis modality, see Fleischmann (1995); cf. Smith (1997: 90), and Haverling (forthcoming c).
249. See Hofmann & Szantyr (1965 § 361.a) and Kiss (1982: 54–56).

progressive function (*-ba-*) developed into a tense form.[250] The Latin perfect is often used as a past narrative tense, and in this function it corresponds to the Greek aorist: when *ueni* means 'came' it corresponds to the Greek ἀφικόμην ((92b) above, Section 3). They therefore occur with adverbials referring to the past, such as *heri* 'yesterday' (219a) or a specific moment in the past such as 'the ninth of December' (219b).

(219) a. Cic. *ac.* 2,59: heri ***audiebamus*** (Carneadem) *solitum esse* ⟨*eo*⟩ *delabi interdum ut diceret opinaturum, id est peccaturum, esse sapientem*
'yesterday we were hearing that Carneades was also in the habit of taking refuge in the assertion that the wise man will occasionally hold an opinion, that is, commit an error'

b. Cic. *epist.* 11,5,1: *Romam autem* ***ueni*** a. d. V Id. Dec.
'I came to Rome on the ninth of December'

The imperfect and perfect tenses indicate absolute time but describe the situations or events from different viewpoints.

The Latin perfect indicates past situations or actions which are no longer in effect, as *fui* 'I have been (and am no more)' (220a) and *uixi* 'I have lived (and live no more)' (220b). Cicero's laconic comment *uixerunt* 'they have lived', after the execution of the Catilinarians, is an example of this usage, which is frequently referred to as an example of the "perfect" use of the Latin perfect.[251] It is never found in the extant Latin texts, however, but in Plutarch, and then in the "complexive aorist" (221a); the use of the Latin perfect implied by this passage has a parallel in (220b). Ancient Greek does not use the perfect in this manner; in (221b), where Cleopatra is addressing Antony's ashes, the perfect indicates current relevance and not that life has come to an end.

250. See Skutsch ([1903] 1914), Sihler (1995 § 498), and Baldi (2002: 397–398; cf. 1976: 846–847); cf. Hopper and Traugott (2003: 158–159). Meiser (1998 § 129) offers a different explanation (involving a reduplication and an imperfective suffix); but Skutsch's explanation fits better with the semantic function of the Latin imperfect tense.

251. See, e.g., Bennett (1910: 46), Kühner & Stegmann (1955 §§ 33.2–3), Ernout & Thomas (1953 § 243a), and Hofmann & Szantyr (1965 § 178a).

(220) a. Verg. *Aen.* 2,325: ***fuimus** Troes, **fuit** Ilium*
'we Trojans are not, Ilium is not'

b. Cic. *rep.* 6,16: *qui iam **uixerunt** et corpore laxati illum incolunt locum, quem uides*
'those who have completed their earthly lives and been relieved of the body and live in the place which you see'

(221) a. Plutarch *Cic.* 22,4: ὁρῶν δὲ πολλοὺς ἔτι τῶν ἀπὸ τῆς συνωμοσίας ἐν ἀγορᾷ συνεστῶτας ἀθρόους … φθεγξάμενος μέγα πρὸς αὐτοὺς «**ἔζησαν**» εἶπεν· οὕτω δὲ Ῥωμαίων οἱ δυσφημεῖν μὴ βουλόμενοι τὸ τεθνάναι σημαίνουσιν
'and seeing that many members of the conspiracy were still assembled in the forum, he cried out to them in a loud voice and said: "They have lived". This is the way the Romans, avoiding the use of the ugly word itself, indicate that someone is dead'

b. Plutarch *Ant.* 84,7: ἐμοὶ μυρίων κακῶν ὄντων οὐδὲν οὕτω μέγα καὶ δεινόν ἐστιν, ὡς ὁ βραχὺς οὗτος χρόνος ὃν σοῦ χωρὶς **ἔζηκα**
'out of all my innumerable ills not one is so great and dreadful as this short time that I have lived apart from thee'

When the Latin perfect and the Greek aorist occur in telic and momentaneous expressions such as *ueni, uidi, uici* 'I came, I saw, I conquered' ((292) below, Section 4.1.1), English uses the past tense; but when they occur in stative expressions ((220), (221a)), the English translation has the perfect. French uses the passé composé in both cases.[252] It is tempting to suppose that the use of the perfect in the translations of Cicero's *uixerunt* into some modern European languages is the reason why this usage is described as typical of the perfect in some grammars.

A form in the passive voice like *uocatus est* means 'was called' (222a), whereas *uocabatur* means 'was being called, had the name of' (222b). There

252. Cf. Perrin (1928: 563 "Came, saw, conquered"; 135–136 "They have lived"), Kind (1752: 507 "Sie haben gelebt") and Flacelière and Chambry (1975: 200 "Je suis venu, j'ai vu, j'ai vaincu"; 1976: 90 "Ils ont vécu"). Cf. the expression βεβίωται μοι used by Cicero in the sense *uixi* 'I have lived my life' in Cic. *Att.* 12,2,1 and 14,21,3 (cf. Hofmann & Szantyr 1965 § 178 Zus. a); cf. Safarewicz (1973); and Johanson (2000: 81–82).

is sometimes an overlap in the passive voice between the present (*saepiuntur* 'are surrounded', *inscribitur* 'is entitled') and the resultative perfect (*saeptus est* 'is surrounded', *inscriptus est* 'is entitled'; (129)–(131) above, Section 3.1.3). The passive imperfect occurs in expressions meaning 'was protected' (223a), but in this case too there is a partial overlap with the periphrastic construction with *eram* and the passive participle ((223b); cf. (250b) below, Section 3.3.3).[253]

(222) a. Vell. 2,39,1: *Domitio Fabioque, nepote Pauli, qui Allobrogicus* ***uocatus est***
'under Domitius and Fabius, Paulus's nephew, who was called Allobrogicus'
b. Cic. *Sest.* 126: *itaque illa uia latebrosior, qua spectatum ille ueniebat, Appia iam* ***uocabatur***
'the name of that road was already the Appian way'

(223) a. Caes. *civ.* 3,26,4: *qui portus ab Africa* ***tegebatur***, *ab Austro non erat tutus*
'this harbor was sheltered from Africa, but it was not protected from the South wind'
b. Caes. *civ.* 3,15,4: *ex pellibus quibus* ***erant tectae*** *naues*
'from the skins with which the ships were covered'

The imperfect tense is sometimes used in polite requests where pure logic seems to require the present tense, for instance in statements like 'I wanted to talk to you' meaning 'I want to talk to you' (224a) or 'where were you going?' meaning 'where are you going?' (224b); there is a similar usage with the verbs of saying (224c). In such a case the situation is described as something that started in the past and is still going on; another example is found in the expression 'it was time' meaning 'it is, and has long been, time' (224d).[254]

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253. See Kühner & Stegmann (1955 § 31.5 Anm. 2) and Hofmann & Szantyr (1965 §§ 176, 179 Zus. a); cf. the discussion of *reliquit* and *relinquebat* and of *relictum erat* and *relinquebatur* by Oldsjö (2001: 178–183).
254. See Kühner & Stegmann (1955 § 32.3 & 4) and Hofmann & Szantyr (1965 § 177); cf. Bennett (1910: 32–35), Moore (1934: 75); cf. also Comrie (1985: 19–20) and Hedin (2000: 256–258); cf. Pinkster (1995: 297–298).

(224) a. Plaut. *Asin.* 392: *Demaenetum* ***uolebam***
'I wanted to talk to Demaenetus'
b. Plaut. *Merc.* 884: *quo nunc* ***ibas****?*
'where were you going just now?'
c. Plaut. *Asin.* 938: ***dicebam****, pater, tibi, ne matri consuleres male*
'I was saying you, father, that you must not play any tricks on mother'
d. Mart. 4,33: *tempus* ***erat*** *iam te, Sosibiane, legi*
'it is high time you were read, Sosibianus'

A peculiar tradition in epistolography is the frequent use of the imperfect tense instead of the present in letters (225a) and of the pluperfect instead of a past (225b). In (225a), *scribebam* indicates the moment when Cicero was composing the letter ('I am writing') seen from the point of view of the receiver ('I wrote'); and in (225b), *scripseram* refers to Cicero's yesterday ('I wrote'), seen from the point of view of the receiver ('I had written'). This peculiar usage disappears after Pliny (ca. 100 CE).[255]

(225) a. Cic. *Att.* 4,3,5: *haec ego* ***scribebam*** hora noctis nona
'I am writing this in the ninth hour of the night'
b. Cic. *Att.* 12,23,3: *id ego quoque audieram et, ut opinor,* heri *ad te* ***scripseram***
'I too have heard, and have written about it too, yesterday I think'

In some cases, such as with modal expressions, the present indicative is used where other languages would choose the subjunctive ((107) above, Section 3.1.1). The imperfect and perfect are used in this way, too. The indicative of modal expressions is found in the past tenses, where other languages prefer the subjunctive mood, for instance *debebam* and *debui* 'should have' or 'ought to' (226), *longum erat* 'it would have been too long' (227a), and *melius fuit* 'it would have been better' (227b). The imperfect tense seems to be used in descriptions of past situations ((226a), (227a)), whereas the perfect is used in more general overviews of past situations ((226b), (227b)).[256]

255. So Ernout & Thomas (1953 § 248); cf. Kühner & Stegmann (1955 § 39) and Hofmann & Szantyr (1965 §§ 176 Zus. c, 177).

(226) a. Cic. *Att.* 13,28,2: *ac uellem quidem; essem enim qui esse* ***debebam***
'I only wish it were, for then I should be the man I ought to be'

b. Ov. *Pont.* 1,7,55: *culta quidem, fateor, citra quam* ***debuit****, illa est*
'I confess that I paid less attention to your doorway (i.e. to paying you my respects) than I ought'

(227) a. Petron. 27,6: ***longum erat*** *singula excipere*
'it would have been tedious to mention all the details'

b. Cic. *Att.* 14,2: melius ***fuit*** *perisse illo interfecto … quam haec uidere*
'it would have been better to die when he had been killed than to see this'

Sometimes the indicative of the perfect and the imperfect is found in a counterfactual sense in conditional clauses as well. In the telic or momentaneous actionality, this effect appears in the imperfect (228a),[257] but it also occurs in the perfect (228b); the difference is between an imperfective description of a situation and a perfective overview. In the perfect tense, this effect may be accompanied by adverbials such as *paene* 'almost' ((229a); cf. (41)–(49) above, Section 2.1.6) and *prope* 'nearly' (229b).[258] In (229a), *pons … iter paene … dedit* means 'the bridge almost permitted passage to the enemy' – that is, it was close to happening but one man stopped it from happening.[259]

256. See Kühner & Stegmann (1955 § 44.2) and Hofmann & Szantyr (1965 § 183.b); cf. Pinkster (1995: 256).

257. See Kühner & Stegmann (1955 § 213.a) and Hofmann & Szantyr (1965 § 360): on the indicative of the past tenses and the irrealis mood cf., e.g., Gerö (2001); on the relationship between imperfective viewpoint and the irrealis mood, see Fleischman (1995), Smith (1997: 90), and Haverling (forthcoming b, forthcoming c); Bybee, Perkins, and Pagliuca (1994: 236–240) observe that languages normally have more than one marker for "irrealis".

258. See Kühner & Stegmann (1955 §§ 44.2.*e*, 215.4) and Hofmann & Szantyr (1965 § 183.b).

259. See Bertocchi (1996: 460).

(228) a. Liv. 2,50,10: ***uincebat****que auxilio loci paucitas, ni iugo circummissus Veiens in uerticem collis euasisset*
'and a handful of men, with the aid of a good position, were winning the victory, when the Veientes who had been sent round by the ridge emerged upon the crest of the hill'

b. Quint. *inst.* 4,5,13: *si* ***occidi****, recte* ***feci****; sed non occidi*
'if I killed him, I did the right thing; but I did not kill him'

(229) a. Liv. 2,10,2: *pons sublicius iter* paene *hostibus* ***dedit****, ni unus uir fuisset, Horatius Cocles*
'the bridge of piles almost afforded an entrance to the enemy, had it not been for one man, Horatius Cocles'

b. Cic. *fam.* 8,14,4: prope ***oblitus sum*** *quo⟨d⟩ maxime fuit scribendum*
'I nearly forgot what I had especially wanted to write'

When indicating result (230a) or purpose (230b), the imperfect subjunctive refers to actions which are posterior compared to the action or situation of the main clause. The temporal reference of the perfect subjunctive is often to the past; in (231a) the sense is perfect 'have been called back', but in (231b) the sense is anterior 'unless you have spared your resources'.[260]

(230) a. Cic. *Manil.* 25: *nostram calamitatem, quae tanta fuit ut eam ad auris imperatoris non ex proelio nuntius sed ex sermone rumor* ***adferret***
'our misfortune, which was so great that it was not a messenger from the battle but a rumor presented in a conversation that brought it to the general's ear'

b. Cic. *p. red. in sen.* 26: *idem consul curauit ut eadem a principibus ciuitatis in contione postero die* ***dicerentur***
'the same consul saw to it that the same things would be said on the day after by the leading men of the state in the public assembly'

260. See Kühner & Stegmann (1955 §§ 45, 47.3 & 7); cf. Hofmann & Szantyr (1965, e.g., §§ 291.a., 340.II.a) and Pinkster (1995: 250, 256–258, 302).

(231) a. Cic. *Catil.* 1,22: *neque enim is es, Catilina, ut te aut pudor a turpitudine aut metus a periculo aut ratio a furore* ***reuocarit***
'no, Catiline, you are not the man to be turned back from infamy by a sense of shame, from danger by fear, or from an act of madness by rational thought'
b. Plaut. *Aul.* 380–381: *festo die si quid prodegeris, / profesto egere liceat, nisi* ***peperceris***
'holiday feasting makes everyday fasting, unless you economize'

In the subjunctive, the perfect indicates potentiality in the present and thus points to the future ((232); cf. (183)–(188) above, Section 3.2.4), whereas the subjunctive of the imperfect tense usually indicates counterfactuality in the present moment (233a) and potentiality in the past (233b). In certain cases, however, the imperfect subjunctive overlaps with the function of the pluperfect and indicates counterfactuality in the past ((234); cf. (247) below, Section 3.3.2).[261]

(232) Cic. *off.* 3,25: *si gladium quis apud te sana mente* ***deposuerit***, *repetat insaniens, reddere peccatum sit, officium non reddere*
'if a man of sound mind were to deposit (to have deposited) a sword with you, (and) reclaim it (when) mad, it would be wrong to return it, right not to return it'

(233) a. Cic. *fin.* 1,13,42: *sapientia non* ***expeteretur***, *si nihil* ***efficeret***
'wisdom would not be sought after, if it did no practical good'
b. Plaut. *Aul.* 742: *nam ni* ***uellent***, *non* ***fieret***, *scio*
'because unless they wanted it, it would not have happened, I am sure of that'

(234) Plaut. *Merc.* 993: *si* sciuissem … *numquam* ***facerem***
'if I had known, I would never had done (it)'

261. See Kühner & Stegmann (1955 §§ 47.4, 5 & 7, 49, 214, 215.1, 2 & 3) and Hofmann & Szantyr (1965 § 361); cf. Grassi (1966: 66, 232–247), Clackson and Horrocks (2007: 213), and Haverling (forthcoming b, forthcoming c).

In some general statements the perfect occurs, sometimes in cases in which English may use both the perfect and the present (235a) and sometimes in cases in which one would expect the present (235b). In some such cases, the use of the perfect may be influenced by the similar use of the gnomic aorist in Greek,[262] but in others it should perhaps be seen as related to some uses of the Latin perfectum itself, such as some uses of the future perfect (cf., e.g., (166) above, Section 3.2.2).

(235) a. Hor. *ars* 343: *omne* ***tulit*** *punctum qui* ***miscuit*** *utile dulci*
'he wins every vote who combines utility and pleasure' (lit. 'he has won every vote who has combined utility and pleasure)'

b. Catull. 62,53–56: *hanc* (uitem uiduam) *nulli agricolae, nulli* ***coluere*** *iuuenci. / at si forte eademst ulmo coniuncta marita / multi illam agricolae, multi* ***coluere*** *iuuenci: / sic uirgo intacta manet, dum inculta senescit*
'no farmers, no oxen tend it (the unwedded vine); but if it chance to be joined in marriage to the elm, many farmers, many oxen tend it: so a maiden whilst she remains untouched, so long is she aging untended'

The viewpoint opposition between the perfect and imperfect tenses is discussed in Section 4, whereas the opposition between anterior situations or events indicated by the pluperfect and other expressions indicating absolute relative tense in the past is dicussed in Sections 3.3.2 and 3.3.3.

3.3.2 The pluperfect

The third past tense form, the pluperfect, indicates absolute-relative time and that a situation or event precedes another situation or event. The pluperfect may occur with adverbials referring to the past generally, such as *heri* 'yesterday' (236a), but also with adverbials explicitly indicating priority in time, such as *prius* 'before' (236b).[263] Latin emphasizes the relative sequence of events and situations and therefore sometimes indicates the absolute-relative

262. See Kühner & Stegmann (1955 § 33.9).
263. See Comrie (1985: 65–67); cf. Kühner & Stegmann (1955 § 35), Hofmann & Szantyr (1965 § 179), and Pinkster (1995: 301–302).

tense relation where other languages do not. This phenomenon is found, for instance, in conditional clauses (237a) but also in relative clauses (237b). Greek or English often has a past tense where Latin has a pluperfect.[264]

(236) a. Plaut. *Stich.* 516–517: *nam ille* heri *me* iam ***uocauerat*** */ in hunc diem*
'because he had already called me yesterday to come here today'

b. Plaut. *Poen.* 93–94: *is ex Anactorio, ubi* prius ***habitauerat****, / huc* commigrauit *in Calydonem haú diu*
'he left Anactorium, where he had been living before, and immigrated here to Calydon not long ago'

(237) a. Cic. *nat. deor.* 1,33: stomachabatur *senex, si quid asperius* ***dixeram***
'the old man used to lose his temper, if I spoke too harshly'

b. Cic. *fin.* 3,7: *quo cum uenissem, M. Catonem, quem ibi esse* ***nescieram****, uidi in bibliotheca* sedentem *multis circumfusum Stoicorum libris*
'when I arrived there, I saw M. Cato, whom I did not know (had not known) to be there, sitting in the library surrounded by a lot of Stoic books'

A peculiar tradition in epistolography in the Classical period is the use of the pluperfect instead of the imperfect or perfect ((225b) above, Section 3.3.1).

To indicate "anterior continuing" in the past with durative temporal adverbials, Classical Latin uses the imperfect tense ((307)–(308) below, Section 4.1.3). The pluperfect occurs with a durative temporal adverb when the situation thus described clearly belongs to the past and does not continue into the present (238).

(238) a. Caes. *Gall.* 1,3,4: *cuius pater regnum in Sequanis* multos annos ***obtinuerat***
'whose father had held for many years the kingship of the Sequani'

264. See Kühner & Stegmann (1955 § 35.1 & 2).

b. Liv. 24,34,13: *sed ea quoque pars eodem omni apparatu tormentorum* ***instructa erat*** *Hieronis inpensis curaque* per multos annos, *Archimedis unica arte*
'but that side also had been provided with the same complete equipment of artillery, at the expense and the pains of Hiero during many years, by the unrivaled art of Archimedes'

Temporal clauses introduced by a number of conjunctions, such as *postquam* 'after', *cum primum* 'when first', and *simulatque* 'at the same time as', usually take the perfect or the historical present indicative ((100b) above, Section 3.1.1); the pluperfect is used when a definite interval is mentioned (239). However, in a few cases there seems to be an overlap between the perfect (240a) and the pluperfect (240b); in Early and Classical Latin the perfect, however, is far more common.[265] There seems to be some functional overlap between the absolute perfect tense and the absolute-relative function of the pluperfect in Early and Classical Latin in other cases, too (241).[266]

(239) Nep. *Ham.* 4,2: (Hamilcar) nono anno postquam *in Hispaniam* ***uenerat***, *in proelio* … occisus est
'in the ninth year after his arrival in Spain, Hamilcar was killed in combat'

(240) a. Plaut. *Epid.* 563–564: *nam* postquam ***audiui*** *ilico / e meo seruo illam esse captam, continuo argentum dedi*
'and as soon as I had heard from my slave that she was captured, I immediately paid the money'

b. Ter. *Andr.* 177–178: *qui* postquam ***audierat*** *non datum iri filio uxorem suo, / numquam quoiquam nostrum uerbum fecit neque id aegre tulit*
'after he had heard that his son would not be given a wife, he never uttered a word to any of us and he was not upset by it'

265. See Kühner & Stegmann (1955 § 207.3 & 4) and Hofmann & Szantyr (1965 § 322.a).
266. So Hofmann & Szantyr (1965 § 179 Zus. a).

(241) a. Ter. *Hec.* 812–813: (dic) *cognosse anulum illum Myrrinam / gnatae suae fuisse quem ipsus olim mi* ***dederat***
'say that Myrrina has recognized the ring as having belonged to her daughter which he once gave me'

b. Ter. *Hec.* 845–846: *sic te dixe opinor, inuenisse Myrrinam / Bacchidem anulum suom habere … eum quem olim ei* ***dedi***
'this is what I think you said. Myrrina has discovered Bacchis wearing her ring, the one I gave her some time ago'

In some cases, even in refined Classical prose, the perfect is found where the pluperfect is expected, in both dynamic (242a) and stative (242b) expressions. Similarly, the pluperfect is used where the temporal reference seems to be not before-past but simply past and where the imperfect or the perfect would be expected, for instance with verbs meaning 'say' and 'indicate' (243a) and in certain relative clauses (243b); the tendency to use the pluperfect in place of the perfect is colloquial.[267]

(242) a. Cic. *Phil.* 4,15: *ille cum exercitum nullum* **habuisset** *repente* conflauit*; hic eum exercitum, quem* ***accepit***, amisit
'the one, when he had no army, hurriedly collected one; this other has lost the army he received'

b. Caes. *civ.* 3,18,5: *ab eis Caesar haec facta cognouit, qui sermoni* ***interfuerunt***
'Caesar learned of these doings from those who were present at the conversation'

(243) a. Plaut. *Capt.* 17–18: *fugitiuos ille, ut* ***dixeram*** *ante, huius patri / domo quem profugiens dominum abstulerat uendidit*
'that runaway slave, as I said before, stole his young master when he decamped and sold him to this man's father'

b. Caes. *Gall.* 2,6,4: *cum finem oppugnandi nox fecisset, Iccius Remus … qui tum oppido* ***praefuerat***, *unus ex eis qui legati de pace ad Caesarem uenerant, nuntium ad eum mittit*
'when night had made an end of assault, Iccius of the Remi,

267. See Kühner & Stegmann (1955 §§ 33.8 Anm.1, 35.3 & 4) and Hofmann & Szantyr (1965 § 179); cf. Bennett (1910: 50–52).

who *was* the officer in charge of the town at this time, and one of those who had come as deputies to Caesar concerning peace, sent a report to him'

In some cases, the indicative of the pluperfect indicates counterfactuality (244a). This can be compared with the use of the pluperfect with, for example, *prope* 'nearly' (244b) or *paene* 'almost' (244c) (cf. the corresponding use of the indicative of the perfect and the pluperfect in (240)–(241) and with *paene* in (41)–(49) above, Section 2.1.6).[268]

(244) a. Cic. *epist.* 12,10,3: *praeclare* ***uiceramus*** nisi … *Lepidus* recepisset *Antonium*
'we would have won if Lepidus had not received Antonius'
b. Cic. *epist.* 7,19,1: *quod praesenti tibi* prope ***subnegaram***, *non tribueram certe, id absenti debere non potui*
'what I had almost been inclined to refuse you, at any rate did not grant you, when you were present, I could not owe you in your absence'
c. Petron. 88,5: *et Myron, qui* paene *animas hominum ferarumque aere* ***comprehenderat***
'and Myron, who almost caught the very soul of men and beasts in bronze'

In Classical Latin, the use of modal verbs and expressions such as *debeo* in the pluperfect indicative is usually related to the idea of absolute-relative tense (245a), but there are also a few examples in which this does not seem to be the case (245b), and they become more common in the later periods. The absolute-relative function is still clear in examples with the future participle (246a) or the gerundive (246b).[269]

(245) a. Cic. *ac.* 2,3: triennio *tardius quam* ***debuerat*** *triumphauit*
'he celebrated his triumph three years later than he ought'

268. See Hofmann & Szantyr (1965 § 183.b) and Pinkster (1995: 301–302); cf. Haverling (forthcoming c).
269. See Kühner & Stegmann (1955 § 35.3 & 4); cf. Bennett (1910: 52–53).

b. Ov. *met.* 9,600–601: *et tamen ipsa loqui nec me committere cerae / **debueram** praesensque meos aperire furores!*
'and yet I should have told him with my own lips, I should in person have confessed my passion, and not have trusted my inmost heart to waxen tablets!'

(246) a. Ter. *Andr.* 542–543: *ut me adiuues in hac re atque uti nuptiae / **fuerant futurae**, fiant*
'so that you help me in this matter and allow the wedding to take place as planned'

b. Cic. *epist.* 1,9,17: *nunc ab iis, a quibus **tuendus fuerat**, derelictus*
'now entirely renounced by those who should have fostered him'

In conditional clauses, the subjunctive of the pluperfect usually indicates counterfactuality in the past (247a), but in some cases it may refer to posterior actions or situations ((247b); cf. (176c) above, Section 3.2.3).[270] In certain temporal clauses it indicates precedence in time, as opposed to the imperfect subjunctive, which indicates simultaneity. Temporal *cum*-clauses in which the action precedes the situation in the main clause have the pluperfect subjunctive, as in *cum uidisset* 'as he had seen' (248a), and such clauses in which the action or situation described by the *cum*-clause is simultaneous with that of the main clause have the imperfect subjunctive, as in *cum uideret* 'as he saw, since he realized' (248b).[271]

(247) a. Cic. *fin.* 1,8: *si ibi te esse **scissem**, ad te ipse **uenissem***
'if I had known you were there, I should have come to you myself'

b. Liv. 2,40,8: *nisi filium* haberem, *libera in libera patria **mortua essem***
'if I had no son, I would die free in a free fatherland'

270. See Kühner & Stegmann (1955 § 215.5); cf. Grassi (1966: 70 n. 10); for a discussion of the modal value of moods and tenses in a counterfactual apodosis, see H. B. Rosén (1980: 15–26).

271. See Kühner & Stegmann (1955 §§ 35.2, 205.2) and Hofmann & Szantyr (1965 § 297.II.B.d); cf. Ernout & Thomas (1953 § 251.II.B).

(248) a. Cic. *epist.* 13,29,4: *ibi eum Caesar cum* ***uidisset****, nihil aspere, nihil acerbe dixit, Romam iussit uenire*
'as Caesar had seen him there, he did not utter a harsh or angry word but bade him to come to Rome'

b. Caes. *Gall.* 4,16,1: cum ***uideret*** *Germanos tam facile impelli ut in Galliam uenirent, suis quoque rebus eos timere uoluit, cum intellegerent et posse et audere populi Romani exercitum Rhenum transire*
'as he saw the Germans so easily induced to enter Gaul, he wished to make them fearful in turn for their fortunes, by showing them that a Roman army could and dared to cross the Rhine'

In some cases the pluperfect indicative seems to replace an absolute past tense (243). Some such cases occur in the subjunctive too (249).

(249) a. *Bell. Hisp.* 2,2: *legatos … de aduentu suo fecit certiores, utque sibi equitatus, qui ex prouincia* ***fuisset****, praesidio esset*
'he informed the officers in command that he had arrived, adding instructions that the cavalry which had been raised in the province should support him'

b. Liv. 32,26,2: *cum duos exercitus in prouincia* ***habuisset****, unum retentum … alterum quam in prouinciam adduxit, totum prope annum Cremonensibus Placentinisque cogendis redire in colonias … consumpsit*
'although he had two armies in the province, one which he had retained in service and one which he had brought into the province, he spent almost the whole year in compelling the people of Cremona and Placentia to return to the colonies'

In later centuries there is a growing overlap between the pluperfect and the imperfect subjunctive in certain cases ((283)–(288) below, Section 3.3.5).

3.3.3 Anterior past

The periphrastic passive perfect with *esse* and the perfect participle may occur with an adverbial locating the event in the past: the perfect then functions as

a past tense (250a); but it may also occur with an adverbial locating it in the present moment (250b). In (250b) there is also an example of the perfect participle with the perfect tense form *fui* indicating an anterior situation. The form with *fui* indicates a situation which no longer holds, as in *positum fuit* 'was deposited (but is no longer there)' in (251a), whereas *positum est* 'was erected' (251b) implies that the situation may still hold.[272]

(250) a. Sall. *Iug.* 14,15: *capti ab Jugurtha pars in crucem acti, pars bestiis* ***obiecti sunt***
'of those who were caught by Jugurtha, some were crucified and others thrown to the wild animals'

b. Cic. *de orat.* 1,187: *omnia fere quae* ***sunt conclusa*** nunc *artibus,* ***dispersa*** *et* ***dissipata*** quondam ***fuerunt***
'nearly all elements which now form the content of art were once without order or correlation'

(251) a. Cic. *dom.* 111: *simulacrum e marmore in sepulchro* ***positum fuit****; hoc quidam homo nobilis deportauit*
'a marble effigy was deposited in the tomb; a certain man of rank has carried it off'

b. Cic. *dom.* 112: *in eo monumento quod* ***positum est*** *ut esset indicium oppressi senatus*
'in that monument which was erected as a sign of the oppressed senate'

The system does not seem crystal clear in all instances, but in most examples of a perfect participle with *fui* in earlier Latin, the temporal reference seems to be before-past, as in 'forgot to say when still at home' (252a), as opposed to the cases with *sum*, as in 'forgot to say now' (252b).[273] In (253b), however, scholars have found an example from Caesar of a semantic overlap between *defensum fuit* and *defensum est* 'was defended', which occurs, for example,

272. See Kühner & Stegmann (1955 § 41.5.*a*) and Hofmann & Szantyr (1965 § 179 Zus. b); cf. Hoffmann (1997:).

273. On remoteness distinctions see Bybee, Perkins, and Pagliuca (1994: 98–104).

in Livy in (253a);[274] but in (253b) *fuit defensum* seems to be anterior to the fact that Cassius left to attack another part of Caesar's fleet. In a few cases there may be a real functional overlap (254), although the blurring between expressions with *fui* and with *sum* and the perfect participle is relatively rare in the earlier periods.

(252) a. Plaut. *Pseud.* 171: *uel opperire, est quod domi dicere* paene ***fui oblitus***
'hold on, though, there is something I almost forgot to say at home'
b. Plaut. *Poen.* 118: paene ***oblitus sum*** *relicuom dicere*
'but I almost forgot to tell you the rest'

(253) a. Liv. 30,27,10: *sedecim non amplius eo anno legionibus* ***defensum*** *imperium* ***est***
'with no more than sixteen legions, the empire was defended that year'
b. Caes. *civ.* 3,101,4: *et nisi eo ipso tempore quidam nuntii de Caesaris uictoria … essent adlati existimabant plerique futurum fuisse uti amitteretur* (Messana). *Sed opportunissime nuntiis adlatis oppidum* ***fuit defensum***, *Cassiusque ad Sulpicianam inde classem profectus est*
'and had not some news of Caesar's victory been brought just at that time, many were of the opinion that Messana would be lost. But news having most opportunely arrived, the town *was defended* and Cassius departed to the Sulpician fleet'

(254) Vitr. 5 *praef.* 3: *Pythagorae quique eius haeresim* ***fuerunt secuti***
'Pythagoras and those who followed his sect'

In Classical Latin, there is a certain system also in the distribution between the pluperfect with *eram* and the perfect participle and the anterior expression with *fueram* (255a). The construction with *eram*, however, often has a resultative function, as in *erant affixa* 'were fastened' (255b); there is therefore a tendency to indicate the absolute-relative tense with *fueram* (255c).

274. Cf. Kühner & Stegmann (1955 § 41.5 Anm. 4.*a*).

Amatus … erat (256a) may be compared with *fuerat … amata* (256b) in the sense 'had been loved'.[275]

(255) a. Caes. *civ.* 1,41,1: *pons, qui* ***fuerat*** *tempestate* ***interruptus****, paene* erat refectus
'the bridge, the construction of which had been interrupted by the storm, was almost reconstructed'

b. Petron. 34,6: *statim allatae sunt amphorae uitreae diligenter gypsatae, quarum in ceruicibus pittacia* ***erant affixa***
'just then some glass jars carefully fastened with gypsum were brought on, with labels tied to their necks'

c. Cic. *div.* 1,74: *armaque quae* ***fixa*** *in parietibus* ***fuerant****, ea* sunt *humi* inuenta
'and the arms which had been fastened to the walls were found on the ground'

(256) a. Liv. 39,9,6: *ultro enim* ***amatus*** *appetitusque* ***erat****, et maligne omnia praebentibus suis meretriculae munificentia sustinebatur*
'for he had been loved and sought out without any effort on his part, and, since his own relatives made provision for all his needs on a very small scale, he was maintained by the generosity of the courtesan'

b. Ov. *fast.* 2,181: *ursa per incultos errabat squalida montes / quae* ***fuerat*** *summo nuper* ***amata*** *Ioui*
'but she, who of late had been beloved by highest Jupiter, now roamed, a shaggy she-bear, the mountains wild'

The gradual blurring of this system starts early and is from the beginning much more frequent in the pluperfect than in the perfect. Already in Early Latin, the form with *fueram* seems to have the same function as a form with *eram* in some cases, for instance in a deponent such as *mercor* 'buy' (257).[276]

275. See Kühner & Stegmann (1955 § 41.5.*b*) and Hofmann & Szantyr (1965 § 179 Zus. b); cf. Hoffmann (1997: 124–126).

276. Cf. Kühner & Stegmann (1955 § 41.5 Anm. 4.*b*) and Hofmann & Szantyr (1965 § 179 Zus. a).

Classical Latin has *locutus eram* 'had talked' (258a), but also *locutus fueram*, which becomes quite frequent in Late Latin (258b).

(257) Ter. *Eun.* 568–569: *forte fortuna domi / erat quidam eunuchus, quem* ***mercatus fuerat*** *frater Thaidi*
'by a lucky chance there was a eunuch at home whom my brother had bought for Thais'

(258) a. Cic. *Verr.* II 5,141: (Servilius) ***locutus erat*** *liberius de istius* (Verris) *improbitate atque nequitia*
'Servilius had talked rather freely about Verres' bad behavior and wickedness'

b. Liv. 42,13,7: *quia liberius aduersus eum ...* ***locuti fuerant***, *delaturosque ad uos quae agerentur,* professi erant, *tollendos curauit*
'because they had spoken too freely against him and had declared that they would report to you what was going on, he caused them to be done away with'

To indicate resultativity, the perfectum system needs periphrastic expressions in Classical Latin, where the active perfect indicates that an action has been performed (259a), while the construction with *habere* from which the various compound perfects of the Romance languages developed originally indicated the maintenance of the result of an action (259b).[277] There are such instances with expressions meaning 'force' (260a) and 'astonish' (260b).

(259) a. Lucr. 2,606: *muralique caput summum* ***cinxere*** *corona*
'they surrounded the top of the head with a mural crown'

b. Varro *ling.* 5,84: *flamines, quod in Latio capite uelato erant semper ac caput* ***cinctum habebant*** *filo, f⟨i⟩lamines dicti*
'the *flamen*-priests were called *filamines*, because their heads were always covered and they had them surrounded by a fillet of wool'

277. See, e.g., Serbat (1975: 126), Harris (1978: 135; 1982: 47–49), Vincent (1982: 79–85), Pinkster (1987); cf. Kühner & Stegmann (1955 § 137.2.*b*); cf. Hofmann & Szantyr (1965 § 178c, Zus. β), Squartini and Bertinetto (2000: 404–406) and Lindstedt (2000: 368).

(260) a. Caes. *Gall.* 1,15,1: *equitatum …* quem *ex omni prouincia … **coactum habebat**, praemittit*
'he sent forward the cavalry, which he had raised from the whole of the province and now had'
b. Val. Max. 3,3: *multorum aures illa lingua … **adtonitas habuerat***
'that tongue had held the ears of many people under its spell'

According to a traditional description, *habere* still has its possessive function in such constructions, but it would be more correct to simply say that they express resultativity.[278]

3.3.4 Indirect past and anteriority

In indirect speech the anterior sense is expressed by a correspondence of tense between the matrix and subordinate clauses. If the matrix clause is in the present or future tense, the tense of the subordinate clause is the present, the perfect, or the future participle with the present (261). But the historical tenses, the perfect (262a), imperfect (262b), and pluperfect (262c) are followed by historical tenses in the system of the sequence of tenses – that is, by the imperfect, the pluperfect, and the future participle with the imperfect.[279]

(261) a. Cic. *Cluent.* 81: *ea* (pecunia) quaeritur *unde **profecta sit**, ab accusatore an ab reo*
'the question is from where the money has come, from the accuser or from the defendant'
b. Cic. *Att.* 10,18,1: *itaque posthac non* scribam *ad te quid* facturus sim *sed quid **fecerim***
'accordingly hereafter I shall write to you, not what I intend to do but what I have done'

278. Cf. Jacob (1995, 1996, 1998, 2001), who has argued against the traditional interpretation of *habere* as having a possessive function and pointed at the valency function of this verb and compared the constructions with *habere* to the ones with the "dativus auctoris".
279. See Kühner & Stegmann (1955 § 180) and Hofmann & Szantyr (1965 § 297.II.B); cf. Pinkster (1995: 125–126, 286) and Binnick (1991: 86–89).

(262) a. Cic. *de orat.* 1,182: quaesitum est *apud maiores nostros, num is ad suos postliminio* ***redisset*** *et* ***amisisset*** *hanc ciuitatem*
'it was a moot point with our forefathers whether by process or restoration he had reverted to his former nationality and lost his Roman citizenship'

b. Cic. *Flacc.* 33: *Flaccus quid alii postea* facturi essent *scire non* poterat, *quid* ***fecissent*** uidebat
'Flaccus could not know what the others were going to do afterward, but he did see what they had already done'

c. Cic. *Phil.* 8,23: *dixitque se renuntiaturum senatui, nisi prius sibi* respondisset *quid* ***facturus esset*** *quam ex illa circumscriptione exisset*
'and said he would report him to the senate if the king did not reply what his intentions were before he stepped out of that circle'

The historical present is often treated as a principal tense ((133) above, Section 3.1.4), but there are exceptions and sometimes both constructions occur in the same passage (263a). The present perfect is often treated as a principal tense (263b), but in some cases it is treated as a historical tense (263c).

(263) a. Caes. *civ.* 1,74,2: *primum* agunt *gratias omnibus, quod sibi perterritis pridie* ***pepercissent*** … *et quod arma cum hominibus consanguineis* ***contulerint*** queruntur
'first they all express gratitude to the others collectively for having spared them the day before when they were in a state of panic, and they express regret that they did not do so at once and that they engaged in a conflict with friends and kinsmen'

b. Cic. *Phil.* 10,8: *sed quo consilio* ***redierim***, *initio* audistis, *post* estis experti
'but my purpose in returning you have heard at the beginning, and have afterward learned by experience'

c. Cic. *fin.* 1,72 : *explicaui … sententiam meam, et eo quidem consilio, tuum iudicium ut* ***cognoscerem***
'I have explained my opinion with the intent that I may get to know what you think about it'

The *anterior sense* is expressed by the perfect infinitives and participles. There is one active (*uocauisse* 'to have called') and one passive perfect infinitive (*uocatus esse* 'to have been called'). The perfect participle of a transitive verb has a passive sense and indicates *anterior* action (*uocatus* 'called)'; there are such participles of intransitive verbs too (*mortuus* 'dead'). In constructions with the accusative and the infinitive, the perfect infinitive or participle indicates anteriority (264a–b) or resultativity (264c).[280] The perfect participle is used in the absolute ablative in temporal adverbials placing a situation in the past (264d). The perfect participles of some transitive deponents, however, have an active sense, as in *cohortatus* 'having exhorted' (265).

(264) a. Cic. *Lael.* 10: *nihil mali* ***accidisse*** *Scipioni puto*
'I do not think anything bad has happened to Scipio'
b. Caes. *Gall.* 6,9,8: *Caesar … reperit a Suebis auxilia* ***missa esse***
'Caesar finds that reinforcements have been sent by the Suebes'
c. Sall. *Catil.* 57,7: *Catilina postquam uidet montibus atque copiis hostium sese* ***clausum*** (esse)
'after Catiline sees that he is enclosed by the mountains and the enemy soldiers'
d. Liv. 1,32,1: ***mortuo Tullo*** *res … ad patres* redierat *hique interregem nominauerant*
'on the death of Tullus, the government had reverted to the senator who had named an interrex'

(265) Caes. *Gall.* 1,25,1: *Caesar …* ***cohortatus*** *suos proelium* commisit
'after a speech to encourage his soldiers, Caesar joined battle'

The perfect participles of some deponents, however, are sometimes used to express simultaneity; this is the function of *ueritus* 'fearing', which was preferred by Caesar and which is the more frequent form in Classical Latin, although some authors, such as Cornelius Nepos, use *uerens* in that sense instead ((144) above, Section 3.1.4).

280. See Hofmann & Szantyr (1965 §§ 162.c Zus. ε, 209) and Pinkster (1995: 304); and Laughton (1964: 2–10); cf. Comrie (1985: 60–61) and Binnick (1991: 95–96).

In Early Latin there are still instances of the perfect infinitive in prohibitions with *uelle* 'want to' and *nolle* 'not want to' (266); this construction is archaic in Classical Latin ((139) above, Section 3.1.4). This usage is related to the use of the perfect subjunctive in prohibitions like *ne hoc feceris* 'do not do this', which as opposed to the construction *ne habuisse uelit* is retained in Classical Latin ((189)–(192) above, Section 3.2.4). The perfect infinitive, however, is also found in constructions with verbs indicating ability, such as *possum* 'can' (267a), and aiming at or wishing for, such as *peto* 'aim at' (267b) and *uolo* 'want to' ((267c); (139)–(140) above, Section 3.1.4); with *uolo* and similar expressions, the passive perfect infinitive occurs with particular frequency (268). The anteriority or the resultative character of the situation described by the perfect infinitive in these cases, however, is usually rather clear. Such examples are also found with modal expressions (269a) or impersonal expressions like *aequum est* 'it is / would be fair' ((269b); cf. (227b) above, Section 3.3.1).[281]

(266) Cato *agr.* 5,4: *ne quid* ***emisse*** uelit *insciente domino, neu quid dominum* ***celauisse*** *uelit. parasitum ne quem habeat*
'he must not want to make any purchases without the knowledge of the master, nor want to keep anything hidden from the master. He must have no hanger-on'

(267) a. Prop. 1,1,15: *uelocem* potuit ***domuisse*** *puellam*
'he was able to subdue the swift-footed girl'
b. Ov. *met.* 14,570–571: *nec te, Lauinia uirgo, / sed* ***uicisse*** petunt
'nor you, Lavinian maiden, did they seek, but only victory'
c. Verg. *Aen.* 6,84–86: *in regna Lauini / Dardanidae uenient* (*mitte hanc de pectore curam*) *sed non et* ***uenisse*** uolent
'into the realm of Lavinium the sons of Dardanus shall come – relieve your heart of this care – yet they shall not also wish for their coming'

281. See Kühner & Stegmann (1955 § 33.10) and Hofmann & Szantyr (1965 § 193); Pinkster (1995: 306) regards these examples as useless as a (partial) basis for an aspectual theory; for the survival of such constructions in Roman historiography, see (282) below, Section 3.3.5.

(268) a. Ter. *Hec.* 727: *me nunc* ***conuentam esse*** expetit
'she wants me now to be approached'

b. Cic. *div. in Caec.* 21: *tamen eos defendes qui* ***se*** *ab omnibus* ***desertos*** *potius quam abs te* ***defensos esse*** malunt*?*
'nevertheless you defend those who want to be deserted by everyone rather than defended by you?'

(269) a. Plaut. *Cist.* 574: *quoi illam dedisset* ***exquisisse*** oportuit
'you should have inquired to whom she gave her'

b. Plaut. *Mil.* 725: aequom fuit ***parauisse***, *uno exemplo ne omnes uitam uiuerent*
'the gods should have provided that we should not all live lives allotted on the same principle'

This usage seems to have an archaic character in the later periods (cf. (282) below, Section 3.3.5).

3.3.5 The development in later Latin

The periphrastic passive perfect with *esse* and the perfect participle may be used as a passive past or perfect tense as well as in a resultative function ((126)–(128) above, Section 3.1.3).[282] Classical Latin has *condita est* in the sense 'was founded' (270a), but later Latin, such as Justinus around 200 CE, often has *condita fuit* in what appears to be the same semantic function (270b). As a result of this development, there is an increasing number of perfect infinitives with the perfect participle and *fuisse* in Late Latin (271).[283] At a later stage, cases are even found where a form like *auditus sit* is used in the sense of *audiatur* ((150) above, Section 3.1.5). However, the *Itinerarium Egeriae* usually has the form with *sum* in the perfect indicative (272a) and *fui* only in two cases which seem to have an anterior function (272b).[284]

282. Cf. Hoffmann (1997).

283. See Hofmann & Szantyr (1965 § 179 Zus. b) and Stotz (1998–2000, 4 § 64).

284. See Kühner & Stegmann (1955 § 41.5 Anm. 4) and Hofmann & Szantyr (1965 §§ 170 Zus. d, 179, 211.a); cf. also Ernout & Thomas (1953 § 249); see also Löfstedt (1911: 306–307). Related to this development is the resultative function in Classical Latin (e.g., in *alea iacta est* 'the die is cast' in Suet. *Iul.* 33 in (128) above, Section 3.1.3): cf. Haverling (2002: 156–157).

(270) a. Cic. *rep.* 2,10: *Roma **condita est** secundo anno Olympiadis septumae*
'Rome was founded in the second year of the seventh Olympiad'

b. Iust. 13,7,1: *Cyrene autem **condita fuit** ab Aristaeo*
'Cyrene was founded by Aristaeus'

(271) a. *Paneg.* 12,2,1: *quod credo adhuc neminem **ausum fuisse***
'which I do not think anybody has dared so far'

b. Greg. Tur. *Franc.* 3,9: *cum autem Theudoricus in Thoringiam esset, Arcernus sonuit, eum **interfectum fuisse** ... Dum haec agerentur, nuntiatur, Theudoricum uiuum de Thoringiam **fuisse regressum***
'as Theodoric was in Thuringia, Acernus spread a rumour that he had been killed. As this was going on, it was made known that Theodoric had returned alive from Thuringia'

(272) a. *Itin. Eger.* 13,2: *Carneas ... dicitur nunc ciuitas Iob, quae ante **dicta est** Dennaba*
'Carneas is now the name of Job's town, which was formerly called Dennaba'

b. *Itin. Eger.* 3,4: *occurrerunt etiam et alii ... qui tamen aut aetate aut inbeccillitate non **fuerunt impediti***
'also other people came and met us, the ones who were not unable to do so because of old age or illness'

Already in Early and Classical Latin there are quite a few examples where *fueram* and the perfect participle seems to replace *eram* with the perfect participle ((255)–(256) above, Section 3.3.3).[285] In the *Itinerarium Egeriae*,

285. Sometimes variation seems to have been responsible, as in the *Vitas sanctorum patrum Emeretensium*: cf., e.g., *VSPE* 1,4: *lumen uero quod ibi accensum erat extinctum inueni ... lumen quod extinctum fuerat ...* 'the light which had been lit I found put out ... the light which had been put out' and *VSPE* 4,7,3–4: *dormienti uisum fuit ... uisum est ei ...* 'was seen by him in his sleep ... was seen by him': cf. Garvin (1946: 70); in the *Vitas sanctorum patrum Emeretensium* there are 71 instances of compound tenses with the present forms of *sum* and 43 with perfect forms; two of the perfect forms are in main clauses, but the others are in subordinate clauses.

from the late fourth century, and in the *Historia Apollonii Regis Tyri* red. A, probably from the sixth century CE, there are several examples of the displacement of the tenses in the pluperfect in expressions like *qui ostensus fuerat* 'which had been shown' ((273a), 8 examples) or *susceptus fuerat* 'had been taken care of' ((274a), 6 examples) as well as in deponents such as *cum … ingressi fuissemus* 'when we had entered' ((273c), 6 examples) or *dum fuisset ingressus* 'as he had entered' ((274b), 4 examples). This is, as a matter of fact, the most frequent pluperfect in these texts. In the examples with *eram* ((273b), 3 examples) or *essem* the function seems to be resultative ((273d), 1 example; (274c), 1 example). In Gregory of Tours, such constructions in the pluperfect (275a–b) as well as in the future perfect (275c) are quite frequent.[286]

(273) a. *Itin. Eger.* 16,6: *in eo loco, qui* ***ostensus fuerat****, inuenerunt speluncam*
'in the place which had been pointed out to them they found a cave'

b. *Itin. Eger.* 12,9: *ciuitates … in montibus* ***erant positae***
'the cities were situated in the mountains'

c. *Itin. Eger.* 11,1: *cum autem* ***ingressi fuissemus*** *ad eos*
'when we had entered their house'

d. *Itin. Eger.* 16,6: *ita tamen, ut … ibi, ubi inuentum fuerat corpus,* ***positum esset***
'in such a manner that it would be located there, where the body had been found'

(274) a. *Hist. Apoll.* red. A 51: *uidit piscatorem illum a quo naufragus* ***susceptus fuerat***
'he saw the fisherman who had taken care of him'

b. *Hist. Apoll.* red. A 34: *sed dum* ***fuisset ingressus****, sedit*
'but when he had entered the room, he sat down'

c. *Hist. Apoll.* red. A 48: *dixerunt mihi quod* ***esset mortua***
'they told me she was dead'

(275) a. Greg. Tur. *Franc.* 4,13: *qui* ***missi*** *a Chramno* ***fuerant***
'who had been sent by Chramnus'

286. See Löfstedt (1911: 306–307) and Väänänen (1981 § 298); cf. Bonnet (1890: 641–645).

b. Greg. Tur. *Franc.* 4,31: *quod cum* ***factum fuisset***, *aduenerunt*
'when that had happened, they came'

c. Greg. Tur. *Franc.* 4,16: *quid* ***gestum fuerit*** *dicamus*
'we shall say what has been done'

The system does not seem crystal clear in all instances even in Classical Latin, but in most examples of a perfect participle with *fui* in earlier Latin, the temporal reference seems to be before-past. In the later period there is a tendency to use *oblitus fui* in the sense of *oblitus sum* 'have forgotten, forgot'; *obliti fueramus* in St. Jerome (276a) seems to correspond both to the *oblitus fui* and the *oblitus sum* of Plautus in ((252) above, Section 3.3.3). The tendency to use the indicative as well as the subjunctive of the pluperfect in a counterfactual function with *paene* and *prope* starts already in the Classical and early post-Classical period and grows in later Latin ((244) above, Section 3.3.2). With *paene* 'almost', Classical Latin prefers the perfect ((229) above, Section 3.3.1), but in later Latin the pluperfect becomes more common, as for instance in Ambrose (276b).[287] In (277) there is a counterfactual clause with the pluperfect subjunctive in the protasis as well as in the apodosis; in a corresponding case the perfect indicative may be found in earlier Latin (cf. *pons . . . iter paene . . . dedit, ni* 'the bridge would almost have offered an opportunity of crossing over, unless' in (229a) above, Section 3.3.1).

(276) a. Hier. *tract.* p. 514 line 247: *simulque considerate, quod* paene ***obliti fueramus*** *dicere*
'consider at the same time what we had almost forgotten to say'

b. Ambr. *in Luc.* 4 line 15: *Sirenes cantu uocis inlectum (*Vlixem*) ad illud famosum uoluptatis naufragium* paene ***deduxerant***, *nisi . . . clausisset aures . . .*
'the Sirens with their singing would almost have brought Ulysses to that famous shipwreck of delight, if he had not blocked his ears'

287. See Hofmann & Szantyr (1965 § 183.b).

(277) Amm. 16,2,10: *hostes … post Caesaris terga legiones duas arma cogentes adorti* paene ***delessent***, *ni subito concitus clamor sociorum auxilia* coegisset
'the enemy attacking the two legions in the rear of Caesar's army would nearly have annihilated them, had not the shouts that they suddenly raised brought up the reinforcements of our allies'

In many literary texts from around 400 CE, the usage is more in accordance with the Classical rules, and some authors, such as Symmachus, avoid this use of *fueram* and *fuissem*, whereas others, such as Augustine (in the *Confessions*) and Ammianus Marcellinus, use it now and then. In the pluperfect they generally have *eram* etc. (Aug. *Conf.*, 27 examples; Amm., 28 examples) or *essem* etc. (Aug. *Conf.*, 28 examples; Amm., 9 examples), but there are also a few examples of *fueram* etc. (Aug. *Conf.*, 5 examples; Amm., 1 example) and *fuissem* etc. (Aug. *Conf.*, 3 examples ; Amm., 7 examples).[288] To a certain degree the literary authors around 400 CE thus seem to be aware of the changes in the tense system and avoid them.

In Classical Latin, the imperfect of *soleo* 'be used to' was *solebam* 'was used to' (278a) and the pluperfect form was the periphrastic *solitus eram* 'had been used to' (278b). In Late Latin, however, there is a tendency to use the old pluperfect as an imperfect; this is the case in Gregory of Tours, who uses *solitus erat* in the sense 'he had the habit, was used to' (279).[289] In Classical Latin there was a viewpoint opposition between *solebam* and *solitus sum* ((301), (303) below, Section 4.1.2), but this difference often seems to have been blurred in later Latin ((390)–(391) below, Section 4.2.3).

(278) a. Cic. *dom.* 75: *quod uos Catilinae gregales de me dicere* ***solebatis****?*
'which you, Catiline's comrades, used to say of me?'

288. Of the Late Latin grammarians, some seem to treat *amatus eram* and *amatus fueram* as equivalent (e.g., Sacerd. *gramm.* VI p. 436 line 35, Charis. *gramm.* p. 217, Prisc. *gramm.* III p. 483), whereas others define *amatus fueram* as *ulterior* (e.g., Diom. *gramm.* I p. 353, Don. *gramm.* IV p. 361).

289. See. Hofmann & Szantyr (1965 § 170 Zus. d); cf. Bonnet (1890: 645).

b. Cic. *Pis.* 11: *ne coniuente quidem te … sed etiam hilarioribus oculis quam* ***solitus eras*** *intuente, dilectus seruorum habebatur*
'while you, I will not say shut your eyes, but gazed with eyes that shone with even more than their accustomed glee, a levy of slaves was held'

(279) a. Greg. Tur. *Franc.* 3,9: *dicere enim* ***erat solitus*** *rex: 'Velim umquam Aruernam Lemanem … oculis cernere'*
'because the king used to say: "some time I would like to see Lake Geneva"'

b. Greg. Tur. *Franc.* 3,35: *requirentes eum, cellulam, in qua dormire* ***solitus erat****, repertam adgrediuntur*
'they looked for him and found the room in which he used to sleep and attacked it'

A fundamental difference between the Latin use of the present and imperfect tenses and that of the corresponding tenses in modern Romance regards the way these tenses function with durative temporal adverbials like *multos annos* 'for many years'. With such adverbials, the present and the imperfect indicate "anterior continuing" in Classical Latin ((99) above. Section 3.1.1; (118) above, Section 3.1.2; (307)–(308) below, Section 4.1.3), whereas modern French or Italian would have to add for instance *depuis* or *da* 'since' to have the same effect when the present and the imperfect tenses are used with such adverbials. Otherwise the tense preferred is the pluperfect, as in English or Scandinavian. There are examples of this development in very Late Latin. In for instance a seventh-century text from Spain, the *Vitas Sanctorum Patrum Emeritensium*,[290] the expression *diu desiderauerat* corresponds to the *diu cupiebant* in Classical Latin ((382) below, Section 4.2.2).[291] Already in Early and Classical Latin, there was a certain overlap between the perfect and the pluperfect in clauses introduced by the conjunction *postquam* 'after' ((240) above, Section 3.3.2). In Late Latin, the imperfect in such clauses is

290. See Garvin (1946: 188–189).
291. See Hofmann & Szantyr (1965 § 183.b); cf. Kühner & Stegmann (1955 § 35.4 Anm. 1, 44.2 Anm. 2).

very rare (280a) and the pluperfect seems to become more common (280b), although the perfect remains more frequent, especially in literary texts.

(280) a. Sulp. Sev. *chron.* 2,49,8: *quorum Instantius prior iussus causam dicere,* postquam *se parum* ***expurgabat****, indignus esse episcopatu pronuntiatus est*
'of whom Instantius, as the first told to defend his case, was declared unworthy of the bishopric, after he had justified himself insufficiently'

b. Vulg. *gen.* 17,1: postquam *uero nonaginta et nouem annorum* ***esse coeperat*** *apparuit ei Dominus*
'when Abram was ninety-nine years old the Lord appeared to him'

The use of the perfect infinitive to indicate resultativity after verbs indicating ability or wish or after various modal expressions becomes rare in Late Latin, and the present infinitive is found more often instead; compare, for instance, the use of the present infinitive in (281) with the use of the perfect infinitive in ((267a) above, Section 3.3.4). But the use of the perfect lives on as a literary device, particularly in the historians (cf. (266)–(269) above, Section 3.3.4), and there are examples in Gregory of Tours (282).[292]

(281) Comm. *apol.* 707: *quos dominus numquam* potuit ***domare*** *monendo*
'whom the lord was never able to subdue with exhortations'

(282) a. Greg. Tur. *Franc.* 4,51: *fulgor per caelum* ***discurrisse*** *uisus est*
'a flame seemed to cross the sky'

b. Greg. Tur. *Franc.* 8,42: *mense septimo arbores uisae sunt* ***floruisse***
'in the seventh month the trees seemed to bloom'

In Late Latin, however, there are at several points a confusion between the functions of the imperfect and the pluperfect subjunctive; as a result the pluperfect subjunctive of the verb *possum* 'be able to' may have the same function as the imperfect subjunctive in counterfactual clauses in the fourth

292. See Bonnet (1890: 637–639); cf. Kühner & Stegmann (1955 § 33.10) and Hofmann & Szantyr (1965 § 193).

century (283a) or in consecutive clauses in the sixth century (283b). In Fredegar's Chronicle from the seventh century, the pluperfect subjunctive of this verb is the form regularly used as the imperfect subjunctive (284).[293]

(283) a. Arnob. *nat.* 1,33: *ipsa denique hiscere si animantia muta* ***potuissent*** *…, si arbores … uocis sonitum* quirent *et uerborum articulos integrare*
'if the silent animals could open their mouths, if the trees were able to produce a sound and put words together'

b. Greg. Tur. *Franc.* 7,10: *cecidisse fertur, ita ut uix manibus circumstantium sustentare* ***potuisset***
'he is said to have fallen so that the hands of those standing around him could hardly sustain him'

(284) a. Fredegar *chron.* 3,11 p. 96: *si Childerico ubicumque* ***potuissemus*** *conperire, libenter eum super nos* recipebamus *ad regem*
'if we could find Childeric somewhere, we would be happy to receive him as our king'

b. Fredegar *chron.* 4,37 p. 138: *Theudericus … consilium* iniebat, *quo pacto Theudebertum* ***potuisset*** *oppremere*
'Theoderic had a plan to kill Theodebert' = 'so that he could kill him'

The rules of Classical Latin grammar require that the relative sequence of events and situations be indicated in complex sentences, for instance in sentences with temporal clauses. Compare the use of *cum uidisset* 'as he had seen' to indicate anteriority and *cum uideret* 'as he saw, since he realized' to indicate simultaneity in ((248) above, Section 3.3.2). In Late Latin, however, these strict rules are not always maintained and *cum uideret* in (285) corresponds to *cum uidisset* 'as he had seen' rather than to *cum uideret* 'as he saw, realized' in Classical Latin. In (286), *cum fugeret* and *quo cum ueniret* corre-

293. See Hofmann & Szantyr (1965 §§ 179 Zus. a, 361a), Väänänen (1981 § 38), and Kiss (1982: 55–63); cf. Bonnet (1890: 639–641).

spond to the constructions *cum fugisset* 'as he had fled' and *quo cum uenisset* 'as he had come there' in Classical Latin.[294]

(285) a. Vulg. *Luc.* 13,12: *quam* ***cum uideret*** *Iesus uocauit ad se et ait illi*
'and when Jesus saw her, he called her and said to her'
b. *Itin. Eger.* 13,4: *ego autem* cum ***uiderem*** *locum tam gratum, requisiui*
'but as I saw such a beautiful place, I asked'

(286) a. Filastr. 29,9: *qui* cum ***fugeret*** *beatum Petrum . . . Romamque deueniret . . . , deuictus . . . oratione beati apostoli*
'who as he fled from the holy Peter and came to Rome, was so subdued by the apostle's words'
b. Optat. 4,7,4: *quo* cum ***ueniret*** *filius Dei, saluator noster, a Iohanne ostensus est his uerbis*
'as the son of God, our savior, came there, he was introduced to the public by John with these words'

The form with the pluperfect subjunctive seems to have been the more elegant in Late Latin. This is indicated by Augustine's use of this form in two of his dialogues (287); but his letters (288a) and a sermon (288b) have the imperfect subjunctive in the same function as the pluperfect in (287b).[295]

(287) a. Aug. *spec.* 7: *quod cum* **uidissem**, *posui in corde meo*
'as I had seen it, I hid it in my heart'
b. Aug. *bapt.* 2,1,2: *cum* **uidissem**, *quia non recte ingrediuntur ad ueritatem euangelii, dixi Petro*
'as I had seen that they do not go into the truth of the gospel in the right way, I said to Peter'

(288) a. Aug. *epist.* 40,3: *cum* **uiderem**, *quia non recte ingrediuntur ad ueritatem euangelii?*
'as I saw that they do not go into the truth of the gospel in the right way'

294. See Hofmann & Szantyr (1965 § 297.II.B.d).
295. See Dolbeau (1996).

b. Aug. *serm. nov.* 10D (162C) par. 11: *sed cum* ***uiderem****, inquit, quia non recte ingrediuntur ad ueritatem euangelii, sicut illic ait*
'as I saw, he said, that they do not go into the truth of the gospel in the right way, as he said there'

The use of the pluperfect to indicate anteriority thus tends to disappear in certain cases, where it previously emphasized the relative sequence of events, while in other cases it replaces the perfect and the imperfect tenses. Already in Early and Classical Latin, the pluperfect sometimes seems to replace an absolute past tense ((240)–(245) above, Section 3.3.2). In Late Latin this tendency increases and there are such examples in, for instance, certain modal expressions ((283)–(284)) or in clauses introduced by *postquam* 'after' (280), and with the adverb *paene* 'almost' ((276)–(277)) or with durative temporal adverbials in expressions indicating "anterior continuing" ((381)–(382) below, Section 4.2.2).

4. Viewpoint

Viewpoint is expressed in varying degrees in the different tenses. Some of the uses of the present tense in Latin are connected with the basically imperfective function of the Latin infectum, but it is only in the past that there is a clear viewpoint opposition in the opposition between the perfect and imperfect tenses.[296]

In several of the world's languages there is no viewpoint opposition in the stative actionality: for instance, in Russian, Navajo, and Mandarin Chinese, stative expressions are normally presented in the imperfective viewpoint, whereas English, for instance, normally uses its past tense in such cases and not its explicitly imperfective progressive construction. But there are also languages which express viewpoint oppositions in all the forms of actionality and hence also in the stative actionality: Greek and French are such languages, and Latin is, too.

296. See Smith (1997: 65–81, 126–128).

The opposition in Classical Latin, however, differs somewhat from that in Greek or the Romance languages, but in the later development the Latin system becomes more similar to the Greek and finally develops into the Romance.[297] Although the viewpoint opposition is found in all the forms of actionality, there is an important statistical difference: the imperfective viewpoint is more frequently used when the actionality is stative or atelic than when it is telic or momentaneous.[298]

4.1 Early and Classical Latin

4.1.1 Progressivity and overview

The opposition between the perfect and imperfect tenses in Latin resembles similar oppositions in many other languages that distinguish imperfective and perfective actions. The Latin imperfect tense describes what was going on at a certain moment in the past and is thus used as an imperfective past (289a), whereas the Latin perfect may be used to indicate past events and thus as a perfective (289b).

(289) a. Plin. *epist.* 6,16,8: ***egrediebatur*** *domo; accipit codicillos Rectinae Tasci*
'as he *was leaving* the house he got a message from Rectina, wife of Tascius'

b. Tac. *ann.* 16,21,1: (Thrasea Paetus) *senatu* ***egressus est*** *cum de Agrippina* referretur
'Thrasea Paetus walked out of the senate during the discussion of Agrippina'

Very often, the Latin imperfect tense of dynamic verbs or expressions occurs in a progressive function and is translated accordingly into English, as

297. See Comrie (1978: 124–127), Smith (1997: 69–70, 73, 84–86), and Johanson (2000: 80–81); on the difference between the Latin and Slavic systems, see, e.g., Tronskij (1973) and Kravar (1968: 65; 1980: 153); on Italian see, e.g., Rohlfs (1949–1954, 3 §§ 671, 672) and Squartini (1995: 119).

298. See Grassi (1966: 143), Oldsjö (2001: e.g. 205, 243), and Haverling (2001); cf. Smith (1997: 66, 70); on Homeric Greek, see Napoli (2006: e.g. 189–191).

in (289a). Such cases often have a verb in the imperfect that indicates what was going on in the background and another verb in the perfect or the historic present indicating an event that took place against that background.[299] This may be the function of the imperfect tense when the actionality is dynamic and atelic (290a) or telic and momentaneous (290b). A similar use of the imperfect tense is found in Greek (291a); and in Russian imperfective verbs may be used in this function (291b). But the modern Romance languages often need a progressive periphrasis in these cases (291c).[300]

(290) a. Cic. *epist.* 9,7,1: ***cenabam*** *apud Seium, cum utrique nostrum* redditae sunt *a te litterae*
'I was dining in Seius's home, when we both got letters from you'

b. Cic. *Verr.* II 2,172: *ad extremum uero cum iste iam* ***decedebat****, eius modi litteras ad eos* misit
'when he was about to leave Sicily, he sent them a letter of the following kind'

(291) a. Xen. *anab.* 1,10,10: ἐν ᾧ δὲ ταῦτα **ἐβουλεύοντο**, καὶ δὴ βασιλεὺς παραμειψάμενος εἰς τὸ αὐτὸ σχῆμα **κατέστησεν** ἀντίαν τὴν φάλαγγα
'but while they *were taking* counsel about this matter, the king *changed* his line of battle to the same form as theirs'

b. *my* ***pisali*** (impfv.) *pis'mo, kogda on* ***pozvonil*** (perfv.)
'we *were writing* a letter when he *called*'

299. See Comrie (1978: 39–40), Klein (1994: 102–103, 108), Bybee, Perkins, and Pagliuca (1994: 133–136), Smith (1997: 74–75, 79, 89–90, 130), and Johanson (2000: 78–82); cf. Bertinetto, Ebert, and de Groot (2000: 530–531); and Bertinetto (2000: 563); cf., e.g., Kühner & Stegmann (1955 §§ 32, 33), Mellet (1988: 97–100), Pinkster (1995: 288–290, 307–310), and Oldsjö (2001: 227–233); and Haverling (1998: 368; 2001: 355–362).

300. On Greek see, e.g., Kühner & Gerth (1898 §§ 383, 386), Smyth (1956 § 1896), Rijksbaron (1994: 12–16, 28, 30–32), and Duhoux (2000: 358–361); on Russian, e.g., Forsyth (1970: 59–118, 154–164); and on Romance, e.g., Giorgi and Pianesi (1997: 175, 177). In the development of progressive periphrases, indications of location in a place play a particular role: see Bybee, Perkins, and Pagliuca (1994: 127–137).

c. *ieri Gianni* ***stava raggiungendo*** *la vetta, quando un violento temporale glielo impedì*
'yesterday Gianni was reaching the top, when a violent storm prevented him'

The Latin perfect, as well as the Greek aorist, is used to describe a series of events (292a) or situations (293b). The aorist is used, as a matter of fact, in the Greek translation of one of the most famous of all quotations with the Latin perfect used in this manner, Caesar's boast after the Pontic victory (292b).[301] As opposed to many other languages, however, Latin can also express a viewpoint opposition when the actionality is stative (cf. (325)–(337) below, Section 4.1.4). The perfect then describes a limited situation and gives an overview of it, as in 'my mother was from Samos' (293a) or 'Caesar first lived in Subura' (293b); such a limited situation described by the perfect may also occur in serial descriptions of past states (293b).

(292) a. Suet. *Iul.* 37,2: *trium uerborum praetulit titulum '****ueni, uidi, uici****'*
'he displayed an inscription of but three words: "I came, I saw, I conquered"'

b. Plutarch. *Caes.* 50,3: ἔγραψε τρεῖς λέξεις· «ἦλθον, εἶδον, ἐνίκησα»
'he wrote three words: "I came, I saw, I conquered"'

(293) a. Ter. *Eun.* 107–110: *Samia mihi mater* fuit*: ea* ***habitabat*** *Rhodi / . . . ibi tum matri paruolam / puellam dono quidam mercator* dedit */ ex Attica hinc abreptam*
'my mother was from Samos. She *was living* at Rhodes; there a merchant *gave* my mother a little girl as a present; she had been stolen from Attica here'

301. Cf. Smyth (1956 § 1927).

b. Suet. *Iul.* 46: ***habitauit*** *primo in Subura modicis aedibus, post autem pontificatum maximum in Sacra uia domo publica* (habitauit)
'he first lived in Subura in a small house, but after he had become the Pontifex Maximus on the Sacred Way in a house that belonged to the state'

The imperfect tense provides us with the background to an event, as in 'she was living at Rhodes', which is the background to the fact that the merchant gave her the little girl (293a).[302] The open situation described by the imperfect tense makes it more frequent in subordinate clauses or in main clauses providing background information.[303]

4.1.2 Quantification and pluri-occasionality

Since it provides a summarized overview of a past situation, the past perfective typically occurs with an explicit reference to a definite number of times ((294a), (295a)) or items ((296a), (297a)), whereas habit, or pluri-occasionality without explicit reference to the number of times, is typically indicated by the imperfective ((294b), (295b), (296b), (297b)).[304] Latin provides examples of this opposition in all the forms of actionality: stative (294), dynamic and atelic (295), dynamic and telic (296) or momentaneous (297).[305] When a reference regarding the number of times is turned into an expression of indefinite frequency, the natural choice is the imperfect tense, as in (298).[306]

302. Cf. Pinkster (1995: 309–310).
303. See Grassi (1966: 193–197) and Oldsjö (2001: 313–344); cf. Haverling (2001: 358).
304. See Klein (1994: 199–205), Johanson (2000: 81), and Hedin (2000: 245); cf. Duhoux (2000: 361, 386–388), Pinkster (1995: 289), and Haverling (1998: 368; 2001: 355–362).
305. Here again Greek has the aorist or, when the past situation is currently relevant, the perfect: see, e.g., Smith (1997: 72, 116); cf. Bertinetto and Delfitto (2000: 199).
306. See, e.g., Klein (1994: 204–205), Johanson (2000: 80), and Hedin (2000: 245–246). Greek uses the imperfect: see, e.g., Kühner & Gerth (1898 § 386 Anm. 4); on Latin cf., e.g., Oldsjö (2001: 215–226).

(294) a. Suet. *Nero* 51: ter *omnino per quattuordecim annos* ***languit***
'he *was* ill but three times in all during the fourteen years (of his reign)'

b. Suet. *Aug.* 81,2: *sub natalem suum* plerumque ***languebat***
'just before his birthday he *was* often *ill*'

(295) a. Liv. 27,30,2: *aduersus hunc ducem . . . Philippus* bis *prospero euentu* ***pugnauit***
'against this general Philip *fought* twice with success'

b. Liv. 29,6,15: *proeliis* cottidie *leuibus* ***certabatur***
'they *fought* every day in light battles'

(296) a. Cic. *Tusc.* 1,77: *is* (Dicaearchus) *enim* tris libros ***scripsit***, *qui Lesbiaci uocantur*
'he wrote three books, which are called "Lesbian"'

b. Plin. *epist.* 5,5,1–2: (Fannius) *opus imperfectum reliquit . . .* ***scribebat*** *. . . exitus occisorum aut relegatorum a Nerone*
'Fannius has left an unfinished work behind him; he was writing about what happened to the people who were killed or exiled by Nero'

(297) a. Ov. *fast.* 3,369: ter ***tonuit*** *sine nube deus,* tria *fulgura* ***misit***
'three times did the god thunder from a cloudless sky, three times did he hurl his bolts'

b. Liv. 23,19,10: *id postero quoque die ac tertio factum est; nocte et* ***mittebantur*** *et* ***perueniebant****; eo custodias hostium* ***fallebant***
'this was done the next day also and the third day. It was night when they were set adrift and when they arrived. In that way they escaped the notice of the enemy's guards'

(298) a. Nep. *Hann.* 7,4: *Carthagine* quotannis *annui bini reges* ***creabantur***
'two annual kings were chosen every year at Carthage'

b. Hyg. *fab.* 125,15: *ad Charybdin . . .* ⟨*quae*⟩ ter die ***obsorbebat***, *terque eructabat*
'to Charybdis who swallowed three times a day, throwing it up again three times'

Pluri-occasionality is, as a matter of fact, often the function of telic or momentaneous expressions when they occur in the imperfect tense. Compare the perfect (299a) and imperfect indicative of *reperio* 'find' (299b).[307] Pluri-occasionality, however, is not necessarily indicated by the imperfect tense in Latin. For instance, a clearly pluri-occasional verb such as the iterative *uentito* 'come often, keep coming' may very well occur in the imperfect without a specific reference to the number of times (300a), but so may the perfect (300b). The difference between these two passages is that (300b) presents an overview of Atticus's life at Athens with several perfect forms (including *praestitit* … *defuit* … *donauit*); in this case the function is pluri-occasional but the emphasis is on the overview of the past situation. In (300a), however, there is a description of the Syracusan tyrant Dionysius's personal character and way of life in which there are numerous forms in the imperfect (including *credebat eorum nemini* … *detorquebat* … *contionari ex turri alta solebat* … *factitabat* … *amabat*).

(299) a. Caes. *Gall.* 1,29,1: *in castris Heluetiorum tabulae* ***repertae sunt*** *litteris Graecis confectae et ad Caesarem relatae*
'in the camp of the Helvetii *were found*, and brought to Caesar, records written in Greek letters'

b. Nep. *Them.* 1,3: *celeriter quae opus erant* ***reperiebat***, *facile eadem oratione explicabat*
'he was quick to see what was needed and able to express his views clearly'

(300) a. Cic. *Tusc.* 5,20,59: *sic noctu ad eas* (duas uxores) ***uentitabat***, *ut omnia specularetur et perscrutaretur ante*
'he used to visit his two wives by night in such a way that the precautions were taken to have a thorough inspection and examination everywhere before he came'

307. Herodotus uses the present stem more often than the aorist with negations, but in the New Testament the aorist is more frequently found with for instance εὑρίσκω: see Fanning (1990: 174–178); cf. Hedin (2000: 238–242) and Haverling (2000: 124–134).

b. Nep. *Att.* 4,4: *nam et ad comitia eorum* ***uentitauit*** *et, si qua res maior acta est, non defuit*
'he used to go to the meetings of their assembly and if some matter of major importance was dealt with he was never absent'

Latin employs not only suffixation but also a particular verb to indicate the habitual sense, and in this it resembles English, which has such a form in the past tense ('used to'), but it differs from modern English in that it also employs this form in the present (*soleo* 'be used to').[308] In the past tenses of this verb, which is a deponent in the perfectum (301a) and an active verb in the infectum (301b), is another example of the fact that pluri-occasionality in Latin may be represented in the perfect (301a) as well as in the imperfect (301b). In (301a) there is a summarizing overview of a past situation, whereas (301b) provides a further description of a topic already introduced by the mention of Epaminondas's rival.[309]

(301) a. Nep. *Cato* 1,1: *M. Cato … hortatu L. Valerii Flacci, quem in consulatu censuraque habuit collegam, ut M. Perpenna censorius narrare* ***solitus est****, Romam demigrauit in foroque esse coepit*
'as M. Perpenna, the ex-censor, *was fond of* mentioning, M. Cato moved to Rome and entered public life encouraged by L. Valerius Flaccus, who was later his colleague in the consulship and in the censorship'

b. Nep. *Ep.* 5,2–3: *habuit obtrectatorem Menecliden quendam … is quod in re militari florere Epaminondam uidebat, hortari* ***solebat*** *Thebanos, ut pacem bello anteferrent*
'he had a detractor in the person of one Meneclides. This man, observing that warfare brought glory to Epaminondas, used to urge the Thebans to seek peace rather than war'

308. See Comrie (1978: 25) and Bybee, Perkins, and Pagliuca (1994: 151–160).
309. See Kühner & Stegmann (1955 § 33.8); cf. Oldsjö (2001: 212)

There are other examples of this opposition between the perfect and the imperfect tense with the adverb *saepe* 'often' (302), sometimes even combined with *solitus est* or *solebat* 'used to' (303); or with a conjunction such as *ubicumque* 'whenever' or 'wherever' (304). Even in these cases, the same opposition is found between the perfective overview ((302a), (303a), (304a)) and the imperfective description ((302b), (303b), (304b)). These cases again exemplify the strong emphasis which Classical Latin puts on the opposition between overview and foreground on the one hand and description and background on the other.[310]

(302) a. Cic. *Pis.* 79: *quod iam de eo his audientibus* saepe ***dixi***
'what I have often said about him when they were listening'

b. Cic. *Brut.* 237: *L. Turius paruo ingenio sed multo labore, quoquo modo poterat,* saepe ***dicebat***
'L. Turius, who was not very talented but a hard working man, often spoke in the senate as well as he could'

(303) a. Cic. *de orat.* 1,170: *P. Crassum illum Diuitem … laudandum puto, quod …* ***solitus est*** *ei* (P. Scaeuolae) persaepe ***dicere*** *neque illum in iure ciuili satis [illi arti] facere posse, nisi dicendi copiam adsumpsisset*
'P. Crassus, the rich one, is in my opinion praiseworthy, because he very often used to tell P. Scaevola that he would not be able do well in civil law, unless he had acquired enough eloquence'

b. Cic. *de orat.* 1,72: *sed, ut* **solebat** saepe *dicere, homo tibi subiratus*
'but as that fellow often said, who was not altogether pleased with you'

(304) a. Liv. 9,37,12: *sed* ubicumque ***pugnatum est***, *res Romana superior fuit*
'but wherever there was a fight, the Romans won'

310. I therefore have to object to the description in Hofmann & Szantyr (1965 § 176 Zus. a), where we are told that the imperfect in for instance *solebat saepe dicere* in (303b) is the natural choice because of the pluri-occasionality.

b. Sall. *Iug.* 54,7: ubicumque *res* ***postulabat***, *praesidium inpositum*
'and garrisons were admitted wherever Metellus thought it advisable'

There is a certain affinity between expressions indicating past states and those indicating the pluri-occasional occurrence of past actions: the habitual reading of dynamic expressions covers many different instances of the same situation, while the stative covers one continuous situation.[311]

Against this background, we now look at three frequently discussed passages from Cicero with the perfect and imperfect tenses (305). The perfect gives a summarizing overview of past situations, and *in Graecia musici floruerunt* means that music and those who exercised it held a privileged position in Ancient Greece (305a); *scripsit Hortensius* refers to the literary work that the great orator left behind when he died (305b); and *Socrates disseruit* refers to the philosopher's orally transmitted teaching (305c). The imperfect describes past situations, and *discebant id omnes* (305a) tells us that everybody was taking music lessons (and not that everybody actually learned music, which would have been implied by the perfect *didicerunt*); *dicebat melius* (305b) refers to Hortensius's oral performances, which were better than one would conclude when reading his still extant work; and *censebat* (305c) refers to the views held by Socrates during his lifetime.[312]

(305) a. Cic. *Tusc.* 1,4: *ergo in Graecia musici* floruerunt, ***discebant****que id omnes nec qui nesciebat satis excultus doctrina putabatur*
'musicians accordingly flourished in Greece; everyone would learn music, and the man who was unacquainted with the art was not regarded as completely educated'

b. Cic. *orat.* 133: ***dicebat*** *melius quam* scripsit *Hortensius*
'Hortensius used to speak better than his written speeches indicate'

311. See Bybee, Perkins, and Pagliuca (1994: 152).
312. See Kühner & Stegmann (1955 § 33.8).

c. Cic. *Tusc.* 1,72: *ita enim* ***censebat*** *itaque* disseruit (Socrates), *duas esse uias duplicesque cursus animorum e corpore excedentium*
'the tenor of Socrates' thought and the arguments he used were that there are two paths, a twofold course for souls on departure from the body'

The strong descriptive and backgrounding element of the Latin imperfect tense may perhaps be described as a relative tense, but then the concept would be employed in a different way than Comrie (1985), for one, does. Therefore I find the concept of 'viewpoint' more useful.[313]

4.1.3 Temporal adverbials and conjunctions

Telic (306a) and momentaneous (306b) expressions are compatible with completive temporal adverbials indicating the amount of "time in which" a certain goal was achieved. Because of its summarizing character, the perfective past is the natural past tense choice in such a case, and Latin has the perfect (306).[314] The perfective viewpoint is generally preferred also when stative (307a) and atelic (308a) expressions occur with durative temporal adverbials indicating how long a past situation lasted; the imperfect tense with such adverbials usually indicates "anterior continuing", thus implying that this situation was still going on in the past moment referred to ((307b), (308b)).[315]

(306) a. Sall. *Iug.* 35,9: paucis diebus ***eodem profectus est***
'he went there in a few days'
b. Liv. 36,42,5: paucis diebus *Piraeum ad ueterem classem* ***peruenit***
'he arrived in a few days at the old fleet at Piraeus'

313. See Haverling (2006b).
314. See, e.g., Smith (1997: 72, 116) and Bertinetto and Delfitto (2000: 199). Greek has the aorist (cf., e.g., Thuc. 3,51,4: τοῦτο **ἐξειργάσαντο** ἐν ἡμέραις ὀλίγαις 'this work *was completed* in a few days').
315. See Lyons (1977, 2: 709–710), Klein (1994: 185–199), Smith (1997: 115, 205), Johanson (2000: 79, 84–85, 148), and Bertinetto, Ebert, and Groot (2000: 535–536); cf. Haverling (2001: 359–360).

(307) a. Suet. *Aug.* 72,1: *ac* per annos amplius quadraginta *eodem cubiculo hieme et aestate* ***mansit***
'for more than 40 years he *remained* in the same bedroom winter and summer'

b. Nep. *Att.* 12,3: *qui* complures annos *studio ductus philosophiae* ***habitabat*** ⟨*Athenis*⟩
'who for many years *had been living* at Athens because of his interest in philosophy'

(308) a. Liv. 35,19,4: *sub hoc sacramento* sex et triginta annos ***militaui***
'under this oath I *fought* for six and thirty years'

b. Liv. 25,33,1–3: *in quibus* per tot annos ***militabat***
'among which he *had been campaigning* for so many years'

The imperfect with such adverbials, however, may also indicate pluri-occasionality and it is found in references to the emperor Augustus's sleeping-habits (309a), in a passage on how a physician prepared a remedy (309b), and with the expression *diu diuque* which indicates pluri-occasionality and means 'over and over again for a long time' (309c).

(309) a. Suet. *Aug.* 78,1: *non amplius cum plurimum quam* septem horas ***dormiebat***, *ac ne eas quidem continuas*
'he used to sleep for no more than seven hours and not even in a single stretch'

b. Scrib. Larg. 161: *lanam sucidam pondo librae uini ueteris sextario* diu ***lauabat***, *deinde expressam* reiciebat
'he used to wash a pound's worth of fresh wool for a long time in a sextarium of old wine, and after having wrung out the wool he would set it aside'

c. Apul. *met.* 11,20: *hanc* **experrectus** *imaginem* diu diuque *apud cogitationes meas* **reuoluebam**, *quid rei portenderet*
'awakened, I was thinking about this apparition over and over again, asking myself what it could mean'

Expressions like *sex et triginta annos* 'for six and thirty years' (308a) merely indicate duration, whereas a determinate expression of duration meaning for instance 'for the whole day' measures not only the temporal extension but

rather the period of observation (310).[316] Latin normally uses the perfect with such expressions too ((310), (311a)), and the imperfect occurs when the sense is pluri-occasional (311b).

(310) Sen. *contr.* 1 praef. 19: *Hortensius ... in auctione* ***persedit*** per diem totum
'Hortenius sat all day at an auction'

(311) a. Liv. 45,24,8: *cum tribus regibus* ***gessistis bella*** per hos annos
'you have waged wars against three kings during these years'
b. Liv. 9,19,3: *quaterni quinique exercitus saepe* per eos annos *in Etruria ...* ***gerebant bellum***
'in those years, frequently four and five armies at a time would take the field in Etruria'

In Greek, the aorist is often encountered with durative temporal adverbials (312), and when the imperfect tense is used, the function is often to indicate "anterior continuing" (313).[317] But the Greek imperfect tense may also be combined with an ordinary durative adverbial (314a) as well as with adverbials indicating determinate duration (314b) without any implication of "anterior continuing".

(312) a. Xen. *anab.* 1,2,9: ἐνταῦθα **ἔμεινε** Κῦρος ἡμέρας τριάκοντα
'Cyrus *remained* there for thirty days'
b. Xen. *anab.* 4,1,14: καὶ **ταύτην μέν τὴν ἡμέραν** οὕτως **ἐπορεύθησαν**, τὰ μέν τι μαχόμενοι τὰ δὲ καὶ ἀναπαυόμενοι
'so they *went on* for that day, now fighting a little and now resting'

(313) Thuc. 4,1,3: τὸ γὰρ Ῥήγιον ἐπὶ πολὺν χρόνον ἐστασίαζε καὶ ἀδύνατα ἦν ἐν τῷ παρόντι τοὺς Λοκροὺς ἀμύνεσθαι
'Rhegium *had been* for a long time *divided against itself* and it was impossible to make any defense against the Locrians'

316. See Bertinetto, Ebert, and de Groot (2000: 535); cf. Comrie (1978: 17).
317. On "anterior continuing" in Greek, see Smyth (1956 § 1892).

(314) a. Xen. *Hell.* 7,1,6: Λακεδαιμόνιοι ὑμῖν **ἐπολέμουν** ποτὲ **πολλὰ ἔτη**, καὶ κρατοῦντες τῆς χώρας οὐδὲν προύκοπτον εἰς τὸ ἀπολέσαι ὑμᾶς
'the Spartans *were waging a war* against you *for many years*, and though masters of your land made no progress toward destroying you'

b. Xen. *anab.* 4,5,7: ἐντεῦθεν δὲ **τὴν ἐπιοῦσαν ἡμέραν ὅλην ἐπορεύοντο** διὰ χιόνος, καὶ πολλοὶ τῶν ἀνθρώπων ἐβουλιμίασαν
'from there they *were marching all the following day* through snow, and many of the men fell ill, faint with hunger'

The "anterior continuing", however, is not necessarily implied when durative temporal adverbials occur with the imperfect tense and a negation. This phenomenon occurs when the actionality is stative (315a), dynamic and atelic (315b), or telic or momentaneous (315c). Compare the descriptions of the situations indicated by the imperfect in (315) to the overview expressed by the perfect in (316).[318] The presence of a negation, in other words, does have an effect on the interpretation of the imperfect tense forms in certain cases.[319]

(315) a. Liv. 34,22,4: *exceptis Aetolis, quibus nec pro spe uictoriae praemia contigerant,* nec diu *quies placere* ***poterat***
'with the exception of the Aetolians, who had neither gained rewards of victory in proportion to their hopes nor proved able to be long satisfied with quiet'

b. Sen. *contr.* 7,7,10: *illos quoque, quos occupauerat,* non diu ***dicebat*** *sed ualenter*
'he did not discuss the ones he did mention for any length of time, though he did discuss them forcibly'

c. Liv. 32,35,2: *Philippus* nullus *usquam* nec *nuntius ab eo* per aliquot horas ***ueniebat***
'Philip was nowhere in sight and *no* messenger from him *arrived for several hours*'

318. See Pinkster (1995: 281); and, e.g., Hedin (2000: 239–242); cf. Johanson (2000: 90).
319. For a different view cf. Oldsjö (2001: 194–204).

(316) a. Liv. 1,27,1: nec diu *pax Albana* ***mansit***
'and the peace with Alba Longa did not last for a long time'

b. Suet. *Tib.* 65,2: per nouem proximos menses non ***egressus est*** *uilla*
'for the next nine months he did not leave the villa'

There are only two examples in Classical Latin without a negation in which the "anterior continuing" function does not strike the reader at first glance, but in both cases such an interpretation is at least possible. They both involve determinate expressions of duration. One of them is stative and combined with an expression of determinate duration meaning 'for the duration of two times ten years' (317a); the focus here is on the old woman who was still waiting for her husband to come home, and the previous description in the imperfect provides the background to that situation – that is, that Penelope had been able to save herself for many years and that she kept waiting in her old age as well. In (317b), where the actionality is dynamic, a number of verbs in the imperfect tense suggest that what is presented is the background to an event, the sudden storm provoked by Juno which shattered the Trojan ships.[320]

(317) a. Prop. 2,9a,3–8: *Penelope* **poterat** bis denos *salua* per annos / *uiuere . . . / coniugium falsa poterat differre Minerua, / . . . / . . . Vlixem / . . . exspectando facta remansit anus*
'Penelope was able to keep her honor for twice ten years, her crafty loom enabled her to put off the hour of marriage, she stayed true and kept waiting for Ulysses even when she had become an old woman'

320. Cf. the perfect in Plautus (*Stich.* 1–3: *credo ego miseram fuisse Penelopam, / Soror, suo ex animo, quae tam diu uidua / Viro suo* ***caruit*** . . .) and Ovid (*trist.* 1,5,57–60: *pro duce Neritio docti mala nostra poetae / scribite: Neritio nam mala plura tuli. / ille breui spatio multis* ***errauit*** *in annis / inter Dulichias Iliacasque domos*).

b. Verg. *Aen.* 1,29–32: *his accensa . . . / Troas . . . / arcebat longe Latio,* multosque per annos / ***errabant*** *acti fatis maria omnia circum*
'inflamed hereby she was doing what she could to keep the Trojans far from Latium and for many years they *had been wandering around* driven by the fates over all the seas'

The way the imperfective viewpoint may be combined with durative expressions or expressions of determinate duration thus differs from one language to another. In Classical Latin, the use of the imperfect tense with expressions of duration seems to be restricted to those indicating "anterior continuing". This inclusive use of the imperfect tense is found in Greek and Latin, but modern West European languages have expressions such as French *depuis* or English *since* or the pluperfect in these cases. This use of the imperfect is related to the "extended present" or "anterior continuing" indicated by the present tense (cf. *multos iam annos habitat* 'has lived here for many years' in (99) above, Section 3.1.1).[321]

With expressions meaning 'while' or 'for the time that', Latin uses the perfect to give a general overview (318a) and the imperfect to indicate backgrounding (318b), whereas Greek prefers the imperfect (322a). The Latin for 'as long as he lived' is *dum uixit* (319a), and the imperfect is only used when the backgrounding of the situation is explicitly emphasized (319b). A similar distribution between the perfect ((320a), (321a)) and the imperfect ((320b), (321b)) is found in Latin with *quamdiu*, but as a rule, Greek uses the imperfect with the corresponding expressions (322b).[322]

(318) a. Plaut. *Truc.* 217–218: dum ***fuit***, *dedit; nunc nihil habet: quod habebat nos habemus, / iste id habet quod nos habuimus*
'he was lavish while he could be; now he has nothing. We have what he had, he has what we had'

b. Cic. *Catil.* 3,16: *ille erat unus timendus ex istis omnibus, sed* tam diu, dum *urbis moenibus* ***continebatur***

321. See, e.g., Kühner & Gerth (1898 §§ 383, 386) and Rijksbaron (1994: 12–16); cf. Pinkster (1995: 280–282) and Haverling (2001: 359–360).
322. See Rijksbaron (1994: 74) and Haverling (2000: 241–246; 2001: 357–359; 2002: 163–164).

'Catiline was the only of these men to be feared and he only so long as he was within the walls of Rome'

(319) a. Ter. *Hec.* 459–461: *homo uoluptati obsequens / fuit* dum ***uixit;*** *et qui sic sunt . . . / sibi . . . hanc laudem relinquont "uixit,* dum ***uixit****, bene"*
'he was a man given to pleasure all his life; men of that kind leave one praise for themselves: "*while* he *lived* he lived well"'

b. Plaut. *Truc.* 164–165: *dum uiuit, hominem noueris: ubi mortuost, quiescat. / te* dum ***uiuebas*** *noueram*
'while a man is alive, you know him; when he is dead, let him rest in peace. Yourself – while you lived, I knew you'

(320) a. Nep. *Hann.* 5,4: quamdiu *in Italia* ***fuit****, nemo ei in acie* restitit
'*as long as* he *was* in Italy, no one was a match for him in the field'

b. Cic. *har. resp.* 47: *haerent ea tela in re publica quae,* quam diu ***haerebant*** *in uno me, grauiter equidem, sed aliquanto leuius ferebam*
'those weapons are inherent in our state which, as long as they were attached to me alone, I accepted with reluctance but still with less suffering'

(321) a. Liv. 34,14,9: *et* quamdiu *missilibus* **pugnatum est** *anceps pugna erat*
'and as long as they were fighting with missiles the outcome was undecided'

b. Cic. *off.* 2,2: *ego autem* quam diu *res publica per eos* ***gerebatur*** *quibus se ipsa commiserat omnes meas curas cogitationesque in eam* conferebam
'now, *as long as* the state *was administered* by the men to whose care she had voluntarily entrusted herself, I devoted all my effort and thought to her'

(322) a. Xen. *Hell.* 3,1,10: ἡ δὲ Αἰολὶς αὕτη μὲν Φαρναβάζου, ἐσατράπευε δ'αὐτῷ ταύτης τῆς χώρας, **ἕως μὲν ἔζη**, Ζῆνις Δαρδανεύς
'this part of Eolis belonged to Farnabazes; Zenis from Dardanus ruled it for him *as long as* he *lived*'

b. Xen. *Hell.* 4,4,15–16: οἱ μέντοι Λακεδαιμόνιοι … **ὅσον χρόνον εἶχον** αὐτῶν τὴν πόλιν, οὐδ' ἐμνήσθησαν παντάπασι περὶ καθόδου φυγάδων
'the Spartans, *as long as* they *held* the city, did not at all mention the return of the fugitives'

These expressions explicitly indicate simultaneity, and in my opinion they provide us with a reason for not using the concept "relative tense" when describing the opposition between the perfect and imperfect in Classical Latin.[323]

Temporal clauses introduced by a number of conjunctions, such as *postquam* 'after', *cum primum* 'when first', and *simulatque* 'at the same time as', usually take the perfect (323) or the historical present indicative ((100b) above, Section 3.1.1), unless the function is continuative or pluri-occasional ((98) above, Section 3.1.1); the pluperfect is used when a definite interval is mentioned ((239) above, Section 3.3.2), but there is a growing overlap and the earliest example is found in Early Latin ((240) above, Section 3.3.2).[324] When the imperfect indicative appears with *postquam* 'since, after', the function is to indicate that at a certain moment in the past a state (324a) or a dynamic situation (324b) was still in effect.[325]

(323) a. Caes. *Gall.* 1,27,3: postquam *Caesar* ***peruenit***, *obsides … poposcit*
'after Caesar arrived, he demanded the surrender of hostages'

b. Nep. *Pel.* 5,3: (*Pelopidas*) *non dubitauit,* simul ac ***conspexit*** *hostem, confligere*
'as soon as he had caught sight of the enemy, Pelopidas did not hesitate to engage in battle'

323. See Oldsjö (2001: 334); cf. Haverling (2006b: 94–95, 97–98).
324. See Kühner & Stegmann (1955 §§ 207, 208).
325. There is a similar usage in Greek (e.g., Xen. *anab.* 1,1,1: **ἐπεὶ δὲ ἠσθένει** Δαρεῖος καὶ ὑπώπτευε τελευτὴν τοῦ βίου 'when Darius lay sick and suspected that the end of his life was near'): see Kühner & Stegmann (1955 §§ 31.4, 207.5); for the use of the indicative of the imperfect tense after, for instance, ἐπεὶ 'after' in Greek (e.g., Herodot. 9,6, Xen. *anab.* 1,1, etc.), see Schwyzer (1959, 2: 659).

(324) a. Liv. 1,23,6: postquam *structi utrimque* ***stabant***, *cum paucis procerum in medium duces procedunt*
‘when both armies had been marshaled, the leaders, attended by a few of their nobles, advanced to the middle of the field’

b. Sall. *Iug.* 28,2: *qui* postquam *Romam* ***aduentabant***, *senatus a Bestia consultus est*
‘as (this deputation) drew near Rome, Bestia referred the question to the senate’

This usage is related to the cases in which some scholars have defined the use of the imperfect tense as “ingressive” ((351) below, Section 4.1.5).[326]

4.1.4 Past states

The Latin imperfect tense describes the ongoing situation in the past, and it may occur with temporal adverbials locating the event in the past, such as *tunc* ‘then’ (325a). The Latin perfect of a stative verb indicates that a past situation no longer obtains, as in *fui* ‘I was / have been (and am no more)’ ((325b); cf. (220) above, Section 3.3.1 above).[327] In English, which does not normally distinguish the perfective and imperfective viewpoints in stative expressions, the stative past expression in *Mary was angry when John broke the glass* might mean either (a) that she was already angry before the event in question or (b) that she became angry because of it.[328] Classical Latin, however, expresses this opposition morphologically, and the stative imperfect forms in (325a) and (326a) describe the states as background situations to events, whereas the stative perfect in (326b) implies that a new situation was created because of an event. The situation in (325b) has a final limit and the one in (326b) seems to have an initial one, whereas there is no such limit in the examples with the imperfect ((325a), (326a)).

326. See Moore (1934: 75); cf. Fleischman (1990: 27–29), Smith (1997: 89), and Hedin (2000: 250–252).
327. See Kühner & Stegmann (1955 §§ 32.1 & 2, 33.2) and Hofmann & Szantyr (1965 §§ 176, 178); cf. Smith (1997: 69–72) and Johanson (2000: 80–82); cf. Mellet (1988: 101–106).
328. See Smith (1997: 85). The description of (325)–(338) differs from the opinion expressed by Oldsjö (2001: e.g. 243); cf. Haverling (2006a).

(325) a. Plaut. *Rud.* 846–847: *etiamne in ara* tunc ***sedebant*** *mulieres, / quom ad me profectu's ire?* :: *Ibidem nunc sedent*
'were the women still sitting on the altar when you left to go to me? :: They are still sitting there.'
b. Plaut. *Capt.* 575: *seruos es, liber* ***fuisti***
'you are a slave, you used to be free'

(326) a. Plaut. *Men.* 29: *Tarenti ludei forte* **erant**, *quom illuc* uenit
'there were by chance games going on at Tarentum, when he arrived there'
b. Liv. 6,8,6: *maxime id euidens* ***fuit***, *cum in laeuum cornu prope iam pulsum arrepto repente equo cum scuto pedestri aduectus conspectu suo proelium* restituit *ostentans uincentem ceteram aciem*
'this was particularly clear, when he suddenly took a horse and a footsoldier's shield and rode up to the left wing which was already almost beaten and renewed the battle thus making himself seen and showing that the rest of the army was winning'

Often the limits imposed on the situation described in the imperfect tense are given by a clause with the perfect tense; (327a) first presents a definition of the time within which a certain situation took place and then a description in the imperfect tense of what the situation was like during that time; and (327b) presents an overview of the situation in the perfect and then a description in the imperfect tense. The keyword in the *quom*-clause in (327a) is *interea* 'during that time' (cf. the use of an unprefixed *sco*-verb in the present tense with this adverbial in (32a) above, Section 2.1.5).

(327) a. Ter. *Hec.* 421–423: dies triginta aut plus eo *in naui* ***fui***, */ quom* interea *semper mortem* **exspectabam** *miser: / ita usque aduorsa tempestate usi sumus*
'I was in the ship for thirty days or more, and during all that time I was expecting death; for the whole time we had such a bad storm'

b. Cic. *Verr.* II 4,10: *si, quod uenale* ***habuit*** *Heius, id quanti* **aestimabat** *tanti* uendidit, *desino quaerere cur emeris*
'if Heius had something to sell and if he sold it at the price he wished, I stop asking you to justify your buying it'

The limited situation described by the perfect is underlined by the fact that such expressions occur with temporal adverbials indicating duration ((328a); (307) above, Section 4.1.3) and in serial descriptions of past states ((293b) above, Section 4.1.1) and are common in main clauses (329a). The open situation described by the imperfect tense makes it more frequent in subordinate clauses indicating cause (328b) or in subordinate or main clauses providing background information (329b). The imperfect is relatively more frequent in subordinate clauses, but there are subordinate clauses of different kinds. There are, for instance, relative clauses which provide a general overview of a situation (330a) and which indicate background situations (330b).[329]

(328) a. Cic. *ac.* 2,16: *sed ipse Carneades diu tenuit, nam* nonaginta ***uixit*** annos
'but Carneades held the school for a long time, he lived for ninety years'

b. Nep. *Them.* 1,2: *qui cum minus esset probatus parentibus, quod et liberius* ***uiuebat*** *et rem familiarem neglegebat, a patre* exheredatus est
'the son displeased his parents by living too lawlessly and neglecting his property, and in consequence was disinherited by his father'

(329) a. Nep. *Them.* 2,5: *huius* (Xerxis) *enim classis mille et ducentarum nauium longarum* ***fuit***, *quam duo milia onerariarum sequebantur*
'Xerxes' fleet was of twelve hundred ships of war, attended by two thousand transports'

329. See Oldsjö (2001: 314–329) and Haverling (2001: 358); cf. Kühner & Stegmann (1955 § 33.8).

b. Nep. *Them.* 3,2: *at classis communis Graeciae trecentarum nauium, in qua ducentae **erant** Atheniensium, … cum classiariis regiis conflixit*
‘but the common fleet of Greece, consisting of three hundred ships whereof two hundred were Athenian, engaged with the king’s marines’

(330) a. Cic. *Att.* 9,6,3: *Pompeius mare transiit cum omnibus militibus, quos secum **habuit***
‘Pompeius crossed the sea with all the soldiers that he had with him’

b. Cic. *Att.* 13,47: *ea, quae in manibus **habebam***, abieci
‘I threw down what I had in my hands’

The difference between Latin and Greek in this respect can be observed in the Latin and Greek versions of the emperor Augustus’s political will from the early first century CE, the so-called *Res Gestae diui Augusti* ‘The deeds of the divine Augustus’. In several cases, a Latin perfect corresponds to a Greek imperfect (331).

(331) a. *mon. Ancyr.* 6,2: *quae tum per me geri senatus **uoluit**, per tribuniciam potestatem perfeci*
(Ἃ δὲ τότε δι’ ἐμοῦ ἡ σύνκλητος οἰκονομεῖσθαι **ἐβούλετο**, τῆς δημαρχικῆς ἐξουσίας ὢν ἐτέλεσα)
‘the measures that the senate then desired me to take I carried out in virtue of my tribunicial power’

b. *mon. Ancyr.* 20,3: *forum Iulium et basilicam, quae **fuit** inter aedem Castoris et aedem Saturni, coepta profligata quae opera a meo patre perfeci*
(Ἀγορὰν Ἰουλίαν καὶ βασιλικήν, ἥτις **ἦν** μεταξὺ τοῦ τε ναοῦ τῶν Διοσκόρων καὶ Κρόνου, προκαταβεβλημένα ἔργα ὑπὸ πατρός μου, ἐτελείωσα)
‘I completed the Forum Julium and the basilica which was located between the temples of Castor and Saturn, works begun and almost finished by my father’

c. *mon. Ancyr.* 28,2: *Italia autem XXVIII colonias, quae uiuo me celeberrimae et frequentissimae **fuerunt**, mea auctoritate deductas habet*

(Ἰταλία δὲ εἴκοσιν ὀκτὼ ἀποικίας ἔχει ὑπ' ἐμοῦ καταχθείσας, αἳ ἐμοῦ περιόντος πληθύουσαι **ἐτύνχανον**)
'Italy too has twenty-eight colonies founded by my authority, which were densely populated during my lifetime'

To indicate the identity of somebody's parent in the past, Latin normally uses the perfect (332a), and the imperfect only in cases in which the situation described is the background to an event (332b). Ancient Greek (333a) and Modern French (333b–c) use the imperfect in both functions.[330]

(332) a. Nep. *Them.* 1,2: *Pater eius Neocles generosus **fuit***
'his father Neocles was of high birth'
b. Sen. *dial.* 5,18,3: *Modo C. Caesar Sex. Papinium, cui pater **erat** consularis, ... aliosque et senatores et equites Romanos ... flagellis cecidit*
'recently C. Caesar flogged Sextus Papinius, whose father *was* of consular rank, and other Roman senators and knights'

(333) a. Plutarch. *Them.* 1,1: πατρὸς γὰρ ἦν Νεοκλέους οὐ τῶν ἄγαν ἐπιφανῶν Ἀθήνησι
'his father *was* Neocles, who was not one of the most distinguished at Athens'
b. Guillemin (1923: 14): *son père Néoclès **était** de grand famille*
c. Marouzeau (1947: 230): *ma mère* était *Samienne* (cf. (293a) above, Section 4.1.1)

The identity of someone's parent is a permanent state. Permanent states in the past are often described in the imperfective viewpoint in the languages of the world, but Latin has a viewpoint opposition even in these cases. When indicating, for instance, the location of a building or a group of trees in the past (334a), Latin normally uses the perfect, and the imperfect tense is found only in cases in which the backgrounding of the situation described is explic-

330. In Early French the passé simple was still used in this way: see Fleischman (1990: 42–43).

itly emphasized (334b).[331] In this case as well, Ancient Greek (335a–b) and Modern Italian (335c) use the imperfect in both functions.[332]

(334) a. Cic. *dom.* 101: *in Vacci pratis domus* ***fuit*** *M. Vacci, quae publicata est et euersa*
'on Vaccus's Meadows *stood* the house of Marcus Vaccus, which was confiscated and razed'

b. Caes. *Gall.* 7,68–69: *Caesar* (Alesiam) … *circumuallare* instituit. *Ipsum* ***erat*** *oppidum in colle summo, cuius collis radices duo duabus ex partibus flumine* subluebant
'Caesar decided to build a wall around Alesia. The town of Alesia was set atop a hill, in a very lofty situation. The bases of the hill were washed on two separate sides by rivers'

(335) a. Thuc. 1,134,1: **ἦν** δ'ἐγγὺς τὸ τέμενος. καὶ ἐς οἴκημα οὐ μέγα ὃ **ἦν** τοῦ ἱεροῦ ἐσελθὼν … ἡσύχαζεν
'the sacred precinct *was* nearby. Entering into a building of no great size that *belonged* to the temple, he kept quiet'

b. Hom. *Od.* 17,208: ἀμφὶ δ' ἄρ' αἰγείρων ὑδατοτρεφέων **ἦν** ἄλσος
'around *was* a grove of poplars, that grew by the waters'

c. *la casa si trovava in campagna* (Squartini 1995: 119)

The use of the perfect to indicate a permanent state in the past is one point where Latin differs from many other languages: the use of the perfective viewpoint is thus relatively extensive in Latin, and there is therefore no ground for the assumption that the imperfect would be the more "natural" choice in the stative or dynamic and atelic forms of actionality in this language too.[333]

331. I do not agree with Hofmann & Szantyr (1965 §§ 176 Zus. a, 177 Zus. a) and Bennett (1910: 34) when they claim that the perfect and the imperfect of *esse* or *solere* may be used as synonyms already in Early Latin; cf. Pinkster (1995: 309–310) and Oldsjö (2001: 243–244).

332. See Smith (1997: 69–70, 84–86) and Johanson (2000: 80); on Latin cf. Haverling (2001: 357–358; 2006b: 86–87, 96, 98); and also Ronconi (1968: 83–84).

333. So Oldsjö (2001: 63, 180, 185, 203, 229, 230, 342, 439, 454, 473, 492); and already Grassi (1966: 186); cf. Smith (1997: 69–70).

In those cases in which a state in the past is *not* of a permanent character but lasted for a limited amount of time, there is more agreement between Latin, Romance, and Greek. When a fact is presented in the foreground of a narrative, the perfect occurs in Latin (336a) and the passé simple in French (336b); and when it is in the background, the imperfect is used in both languages (337). Greek has no aorist of the verb meaning 'to be', εἶναι, whereas Latin has both the perfect tense form *fui* and the imperfect tense form *eram* of the verb *esse*. But Greek sometimes uses the aorist form of the verb γίγνομαι 'become', ἐγενόμην, in cases where Latin uses *fui*, for instance in the description of past states of limited duration (338a); and in certain cases the imperfect ἐτύγχανε meaning 'happened to be' and the present participle emphasizes the background description of a past situation (338b).

(336) a. Nep. *Them.* 6,1: *magnus hoc bello Themistocles* ***fuit*** *neque minor in pace*
'Themistocles *was* great in this war and he *was* no less great when peace came'

b. Guillemin (1970: 18): *s'il* ***fut*** *grand dans la guerre . . . Thémistocle ne le* ***fut*** *pas moins quand la paix fut une fois conclue*

(337) a. Nep. *Dat.* 2,1–3: *pari se uirtute postea praebuit* (Datames) . . . ***Erat*** eo tempore *Thuys dynastes Paphlagoniae . . . bello eum persequi constituit* (rex) *eique rei praefecit Datamen*
'Datames later showed himself equally valiant. At that time there *was* a prince of Paphlagonia called Thuy; the king determined to make war upon him and gave the management of the campaign to Datames'

b. Guillemin (1923: 75): *il y a* ***avait*** *à cette époque un prince de Paphlagonie . . . Thuys*

(338) a. Thuc. 5,5,1: καὶ **ἐγένετο** Μεσσήνη Λοκρῶν τινὰ χρόνον
'and Messene *was* in the hands of the Locrians for some time'

b. Xen. *anab.* 6,6,5: **ἐτύγχανε** δὲ τὸ στράτευμα ἔξω **ὂν** ὅτε ἀφίκετο
'the army happened to be outside when he came'

The Latin perfect indicates past situations or actions which do not remain in effect, such as *fui* 'I have been (and am no more)' and *uixi* 'I have lived (and live no more)' ((220)–(221) above, Section 3.3.1).

4.1.5 Ingressivity

A function often ascribed to the perfective past is the expression of a change into or out of a state. The aorist of a Greek stative or a dynamic and atelic verb may have an ingressive function not normally encountered in Early or Classical Latin. The Greek complexive aorist and the Latin perfect are both used to give a comprehensive view of a past situation and are then often found with durative temporal adverbials indicating for how long a time the past situation lasted. Both the Greek aorist ἐβασίλευσε (339a) and the Latin *regnauit* (339b) are used in the sense 'was king, ruled'. The Greek form, however, may also be used in the sense 'became king, started ruling' (340a), a function in which Latin uses a phrase like *regnare occepit* (340b).[334]

(339) a. Her. 2,157: Ψαμμήτιχος δὲ **ἐβασίλευσε** Αἰγύπτου τέσσερα καὶ πεντήκοντα ἔτεα
'Psammetichus ruled Egypt for fifty-four years'
b. Liv. 1,21,6: *Romulus septem et triginta* ***regnauit*** *annos*
'Romulus ruled 37 years'

(340) a. Her. 2,174: ἐπείτε δὲ καὶ **ἐβασίλευσε**, ἐποίεε τοιάδε
'when he became king, he did the following things'
b. Liv. 1,49,1: *inde L. Tarquinius* ***regnare occepit***
'thereafter Lucius Tarquinius became king'

In Early and Classical Latin, a stative perfect like *tacui* is used as a perfect in the sense 'have not spoken' (341a) or in the comprehensive sense 'I was silent, did not speak' (341b), whereas the corresponding prefixed counterpart *conticui* has the ingressive function 'I stopped talking' (342).[335] The Latin imperfect tense of the stative verb is only used when the backgrounding of the situation is underlined (343a) and often in a pluri-occasional sense (343b), whereas the rare occurrences of *conticesco* in the imperfect tense have a pluri-occasional function ((344); cf. (299) above, Section 4.1.2).

334. See, e.g., Smith (1997: 70) and Johanson (2000: 81–82); and, e.g., Smyth (1956 § 1925) and Rijksbaron (1994: 20–21, 77); cf. Comrie (1978: 19); cf. also Hofmann & Szantyr (1965 § 178.c.α).
335. See Haverling (1994; 2000: 224–225; 2003a: 118–119).

(341) a. Plaut. *Truc.* 817: ***tacui*** *adhuc: nunc* ⟨*non*⟩ *tacebo*
'I *have kept silent* so far, but now I shall not keep silent'

b. Cic. *Att.* 3,15,6: *quo modo autem iis … et de re dicentibus et ut referretur postulantibus Clodius* ***tacuit****?*
'and how *could* Clodius *remain silent* when all those people were talking about the matter and demanded that it should be discussed?'

(342) Cic. *Catil.* 3,10: *recitatis litteris … repente* ***conticuit***
'when the letter had been read out, he suddenly *fell silent*'

(343) a. Cic. *Sest.* 40: *me uero non* (mouit) *illius oratio, sed eorum taciturnitas …; qui tum quamquam ob alias causas* ***tacebant****,* *tamen … tacendo loqui … uidebantur*
'I was not as much upset by what he said, but by the silence of the others; although they *refrained from talking* for other reasons, with their silence they seemed to be speaking'

b. Sen. *epist.* 47,4: *in conuiuiis loquebantur, sed in tormentis* ***tacebant***
'they talked during the dinner-parties, but *kept their silence* when interrogated under torture'

(344) Liv. 25,10,6: *postquam lux certior erat …* ***conticescebat****que* paulatim *tumultus, tum Hannibal … iubet*
'when there was more light and *the turbulence was gradually ceasing*, then Hannibal gives the order'

Where Greek uses the aorist of a stative verb to indicate a change of state, Classical Latin uses a verb meaning 'begin' (340b), a prefixed verb (342), or an entirely different verb. Compare the difference between the comprehensive overview presented by *Romam … habuere* 'had Rome' (345a) and *is finis fuit* 'this was the end' (346a) and the change of state underlined by the ingressive expressions *litteras accepi* 'got a letter' (345b) and *finis factus est* 'end was made of' (346b). In Greek, however, the opposition between the aorist and the imperfect often corresponds to that between 'got, acquired' and 'had' (347).[336]

336. See Haverling (1994: 48–50; 1998: 364–366; 2000: 55–57, 215–218, 242).

(345) a. Sall. *Catil.* 6,1: *urbem Romam, sicuti ego accepi, condidere atque initio* ***habuere*** *Troiani*
'the city of Rome, according to my understanding, was at the outset founded and inhabited by Trojans'
b. Cic. *Att.* 9,14,1: *eodem die Capua litteras* ***accepi*** *a Q. Pedio*
'that same day I got a letter from Q. Pedius'

(346) a. Liv. 3,70,8: *is* finis *pugnae equestris* ***fuit***
'this *was* the end of the cavalry battle'
b. Liv. 26,46,10: *tum signo dato caedibus* finis ***factus*** (est)
'then the signal was given and an end *was made* of slaughter'

(347) Plat. *Protag.* 321d: τὴν μὲν οὖν περὶ τὸν βίον σοφίαν ἄνθρωπος ταύτῃ **ἔσχεν** (aor.), τὴν δὲ πολιτικὴν οὐκ **εἶχεν** (impf.)· ἦν γὰρ παρὰ τῷ Διί
'although man *acquired* in this way the wisdom of everyday life, civic wisdom he *had* not, since this was in the possession of Zeus'

As we have already seen in the expression *euidens fuit* 'it was clear' ((326b) above, Section 4.1.4), the perfect of a stative expression sometimes seems to express an initial limit. Sometimes scholars have interpreted such examples of *habui* (348a) or *fui* (348b) in Classical Latin as ingressive,[337] but in my opinion the perfect gives a comprehensive overview of past situations in these cases and *habuit euentum* corresponds to 'the outcome was' (348a) and *saluti fuit* means 'was the savior of' (348b).[338]

(348) a. Caes. *Gall.* 5,43,5: *hic dies nostris longe grauissimus fuit, sed tamen hunc* ***habuit*** *euentum ut eo die maximus numerus hostium uulneraretur atque interficeretur*
'this day was by far the most serious for our troops, with the result, however, that a greater number of the enemy were wounded and slain than on any other day'

337. So, e.g., Petersmann (1977: 178–179) and Oldsjö (2001: 244–251); cf. Kühner & Stegmann (1955 § 33.3).
338. See Haverling (2002: 162–164); see also Pinkster (1995: 301); cf. Haverling (2000: 242).

b. Caes. *Gall.* 7,50,6: *ita pugnans post paulum concidit ac suis saluti* ***fuit***
'so, a moment later, he fell fighting and *saved* his men'

The initial interpretation, which is sometimes natural to us in such cases, must not be confused with an ingressive use of the stative perfect found in many other languages. In these cases the Latin perfect expresses an overview of a past situation and corresponds to the complexive aorist in Greek.[339] In my view, the fact that *habui* did not yet have an ingressive sense in Classical Latin is indicated by the relationship between *habui* and *habebam* in expressions meaning 'had (was the parent of) a son or daughter' and 'fathered/bore (became the parent of) a son or daughter'; an expression such as *habuit filios* means 'had sons' (349a) and in the sense 'fathered sons' Classical Latin has something like *filios genuit* (350). In (349b), the foreground information is that Gala ruled this part of Numidia, and the fact that he had a son, expressed by the imperfect tense in *filium … habebat*, is then providing us with a more detailed description of the situation.[340]

(349) a. Liv. 41,23,10: *duos, ut scitis,* ***habuit*** *filios Philippus*
'as you know, Philip had two sons'

b. Liv. 24,48,13: *Carthaginienses … ad Galam in parte altera Numidiae … regnantem legatos mittunt. Filium Gala Masinissam* ***habebat*** *septem decem annos natum*
'the Carthaginians sent legates to Gala, who reigned in another part of Numidia. Gala had a son Masinissa, seventeen years old'

(350) a. Liv. 1,34,2: *uxore ibi ducta duos filios* ***genuit***
'he married there and *fathered* two sons'

339. Cf. the opposition between the "conative" imperfect tense and the aorist in Greek and between prefixed and unprefixed verbs in Latin: see Haverling (2000: 234; 2001: 360–361).

340. See Haverling (1994: 48–50; 1998: 364–366; 2000: 242); cf. Comrie (1978: 19) and Smith (1997: 70). The fact that there are these changes in Latin and that the Latin system in this respect differs from the Romance one has not always been taken into consideration (e.g. not in Hewson 1997a: 327).

b. Ter. *Phorm.* 942–943: *ex qua filiam / **suscepit***
'by whom he fathered a daughter'

In Greek the difference between 'had (was the parent of) a child' and 'bore/fathered a child' may be expressed by the opposition between the imperfect and the aorist tenses.[341] In this respect Classical Latin also differs from Romance, where the opposition between the imperfect (i.e., the French imparfait, the Italian imperfetto, etc.) and the past tense (i.e., the French passé simple, the Italian passato remoto, etc.) may express that difference (cf. (372) below, Section 4.2.1).

The imperfect may seem to have an ingressive function when a new situation is introduced in this tense, thus implying that it has begun but that it is left unfinished (351); a similar pragmatic effect is found in constructions with *postquam* 'since, after' with the imperfect tense, where the function is to indicate that at a certain moment in the past a certain situation was still in effect ((324) above, Section 4.1.3).[342]

(351) Ter. *Eun.* 432–433: *denique / **metuebant** omnes iam me*
'after that they were all afraid of me'

The function of the imperfect is not really "ingressive" in such cases: the past tense in an expression like 'suddenly he stopped talking' is ingressive, whereas the past tense in 'suddenly he was silent' is not. The ingressivity in the latter case is implied by the context and not by the verb form.[343]

341. Classical Greek has the old construction with 'be' or 'become' and the dative (cf., e.g., Herodot. 1,34 and 6,61); in later Greek, however, there are examples of the imperfect of 'have' in expressions meaning 'had a son' (e.g., NT *Marc.* 12,6) and of the aorist in expressions meaning 'bore/fathered a child' (e.g., Diod. Sic. 4,60,4: ἕτερα τέκνα ἔσχε πλείονα νόθα 'he fathered several other children out of wedlock'); Liddell, Scott, and Jones (1968) mentions Nic. Dam. 11: παῖδα ἔσχεν 'she bore a child'.

342. See Hofmann & Szantyr (1965 § 176 Zus. b); cf. Moore (1934: 75); and Fleischman (1990: 27–29), Smith (1997: 89), and Hedin (2000: 250–252).

343. Johanson (2000: 83) observes that Ger. *Plötzlich schlief er ein* 'suddenly he fell asleep' denotes the beginning of the action 'to sleep', whereas *Plötzlich schlief er* 'suddenly he was asleep' does not.

4.1.6 Telicity, momentaneousness, and imperfectivity

The imperfect tense refers to an action which was going on in the past but is not yet finished at the moment described. One effect of the combination of telicity and imperfectivity is the famous “imperfective paradox”. This means that there is a clash between the imperfect and the telic actionality of the verb and that the action is described as being interrupted before the final end was reached. In such cases the unfinished character of the telic action is sometimes underlined by translations into English using expressions which emphasize the attempt. This is the background of the “conativity” which has sometimes been ascribed to the imperfect tense (352a–b); there is a corresponding use of the present tense in Latin ((97) above, Section 3.1.1). In Latin this construction is found with an Achievement verb like *uenio* ‘come’ (352c), but in English or Scandinavian the corresponding construction occurs more often with an Accomplishment expression like ‘go to’ or ‘walk to’ (e.g., *Mary was walking to school but did not actually get there*).[344]

(352) a. Caes. *Gall.* 5,9,6: *ipsi … nostros … intra munitiones ingredi* ***prohibebant****. At milites legionis septimae … locum ceperunt*
‘the enemy *sought to prevent* our troops from entering the fortifications. But the men of the seventh legion took the position’

b. Liv. 3,15,7: *consules …* ***sedabant*** *tumultus, sedando interdum mouebant*
‘the consuls tried to still the uproar, and sometimes by their efforts made it the greater’

c. Cic. *Lig.* 24: ***ueniebatis*** *in Africam …* prohibiti estis *in prouincia uestra pedem ponere*
‘you *were on your way* to Africa but you *were not allowed* to enter the province’

344. See Smith (1997: 63, 75–77, 83) and Hedin (2000: 230–231, 246–250); cf. Kühner & Stegmann (1955 § 31.8), Hofmann & Szantyr (1965 §§ 168.d, 176 Zus. a), Pinkster (1983: 301–303; 1995: 296), Mellet (1988: 288–292), and Oldsjö (2001: e.g. 233–241); on the relationship between *eo* ‘go’ and *uenio* ‘come’ from Early to Late Latin and Romance, see Ricca (1993: 118–132).

Classical Greek makes a more extensive use of this semantic effect than Latin; in some cases, Greek uses the opposition between the aorist and the imperfect, where Classical Latin uses the actional opposition between a prefixed and an unprefixed verb. Latin uses an atelic form like *suadebat* or *suasit* in the sense 'tried to persuade' (353a–b) and the telic *persuasit* in the sense 'did … persuade' (353c). There are only two examples of the imperfect tense of *persuadeo* in the Latin texts before about 200 CE. In both examples, the imperfect is used to describe the background rather than in a "conative" sense; the expression *uix cuiquam persuadebatur* in Livy means 'hardly anyone believed' (354a), and the example from Pseudo-Quintilian is found in a description of a dream (354b).[345] In Classical Greek, however, the imperfect of the verb πείθω may be used in the "conative" sense 'tried to persuade, told (to do)', as opposed to the aorist which means 'persuaded' (355a). A similar difference between the imperfective and the perfective aspect is found in Russian (355b), but not in Modern Greek, which has a periphrastic expression in the former case (355c).[346]

(353) a. Phaedr. 1,15,4–6: *asellum in prato timidus pascebat senex. / Is hostium clamore subito territus / **suadebat** asino fugere, ne possent capi*
'a timid old man pastured an ass in a field. Frightened by a sound from the enemies, he *tried to persuade* the ass to run away, so that they could not be caught'

b. Ter. *Hec.* 660–661: *mater quod **suasit** sua / adulescens mulier fecit*
'whatever her mother *told* her to, this young woman would do'

c. Nep. *Them.* 2,2: *ille **persuasit** populo ut ea pecunia classis centum nauium aedificaretur*
'he *persuaded* the people to use that money to build a fleet of a hundred ships'

345. See Haverling (2001: 361); cf. Hofmann & Szantyr (1965 § 168.a Zus. d), Pinkster (1983: 303), and Oldsjö (2001: 239 n. 485).
346. On Russian see Comrie (1978: 19), on Classical Greek Rijksbaron (1994: 16–17), and on Modern Greek Hedin (2000: 247).

(354) a. Liv. 33,32,3: *alii alia … sermonibus etiam ferebant Romanos facturos:* uix cuiquam ***persuadebatur*** *Graecia omni cessuros*
‘they even discussed openly what the Romans would do; almost no one believed that they would withdraw from all Greece’

b. Ps. Quint. 10,13–14: *constitit ante me filius discussis tenebris … Quam laetum se, quam hilarem offerebat, quomodo* ***persuadebat*** *mihi, ne crederem morti!*
‘my son stood there before me when the shadows vanished. How happy and glad he was showing himself! How he *was convincing* me not to believe in death!’

(355) a. Xen. *Cyr.* 5,5,22: ἐλθὼν οὖν **ἔπειθον** (impf.) αὐτοὺς καὶ οὓς **ἔπεισα** (aor.) τούτους λαβὼν ἐπορευόμην σοῦ ἐπιτρέψαντος
‘so I went there and *tried to convince* them and those whom I *persuaded* I took with me, by your permission, on my expedition’

b. *on dolgo* ***ugovarival*** (impfv.) *menja, no ne* ***ugovoril*** (perfv.)
‘he spent a long time *trying to persuade* me, but *did not* actually *persuade* me’

c. ***prospathúse*** *na me* ***písi*** *epí dhío óres, alá dhe me* ***épise***
‘he *tried to convince* me for two hours, but he didn’t (manage to) convince me’

Due to the blurring of the actional opposition between prefixed and unprefixed verbs in Late Latin, *persuadeo* becomes more common in the imperfect tense as well, and in some cases it occurs in something that looks like a “conative” function ((366) below, Section 4.2.1).[347]

With a negation, the imperfect of a telic or momentaneous verb often indicates what could not happen (356) or what someone would not do ((357a), (358a)), as opposed to the perfect, which indicates what did not happen ((357b), (358b)). The same opposition is found in the use of the Greek

347. See, e.g., Oldsjö (2001: 239).

imperfect and aorist. A phrase like *non accipiebant* (357a) comes rather close to an expression like *accipere nolui* (359).[348]

(356) a. Petron. 51,1: *phialam uitream, quae* non ***frangebatur***
'a glass cup that was unbreakable'

b. Cic. *Att.* 14,1,1: *etenim si ille* (Caesar) *tali ingenio exitium* non ***reperiebat***, *quis nunc reperiet?*
'for, if Caesar with his genius *could not find* a solution, who will find it now?'

(357) a. Liv. 34,4,10: *cum aurum et purpuram data et oblata ultro* ***non accipiebant***
'when they *would not accept* gold or purple voluntarily offered to them'

b. Cic. *Att.* 5,21,4: *nam quas Hermoni … scribis te dedisse* ***non accepi***
'because I *have not received* the letter which you write that you gave to Hermones'

(358) a. Liv. 22,32,2: *in casum uniuersae dimicationis, quam omnibus artibus petebat hostis,* non ***ueniebant***
'a general engagement, which the enemy sought with all the arts at his command, they declined to risk'

b. Cic. *S. Rosc.* 74: *qui Romam multis annis* non ***uenit*** *neque umquam plus triduo fuit?*
'who for several years did not come to Rome and never stayed here more than three days'

(359) Cic. *Att.* 8,12,2: *Capuam …* ***accipere nolui***
'I refused to take over Capua'

In other words, the presence of a negation does have an effect on the interpretation of imperfect tense forms in certain cases.[349]

348. Cf. Thuc. 3,64,3: τὴν … πρόκλησιν … οὐκ **ἐδέχεσθε** 'you *would not accept* … the proposal' and Thuc. 1,24,1: τὴν ἱκετείαν οὐκ **ἐδέξαντο** 'they *did not receive* the supplication': see, e.g., Hedin (2000: 242); cf. Rijksbaron (1994: 15–16). Negations are more frequent with the imperfective viewpoint in Russian: see, e.g., Forsyth (1970: 60, 102–117).

349. For a different view cf. Oldsjö (2001: e.g., 204).

4.1.7 Tense and narrative

According to a schoolbook maxim, the basic difference between the perfect and the imperfect tenses in Latin is that the narrative advances in the perfect and lingers in the imperfect (*perfecto procedit, imperfecto insistit oratio*).[350] When used as a narrative tense in Classical Latin, the perfect gives an overview of a past situation and puts it in the foreground of the story, while the imperfect emphasizes the backgrounding of an action. Backgrounding is thus an important factor in the viewpoint system in Classical Latin. In narrative contexts, however, not only the perfect and imperfect occur, but also the pluperfect expressing anteriority; the present tense, which may either refer to the *hic* and *nunc* of the storyteller or be used as a historical present; and the historical infinitive.[351]

Sallust's choices between *fui* and *eram* in the *Iugurtha* illustrate how the two absolute past tenses work in a narrative context. He uses both the perfect *fuere* and the imperfect *erat* with the same temporal adverbial, *ea tempestate* 'at that time'. When he has told us about Iugurtha and his position in the Numidian royal house, Sallust makes his first comment on the morally corrupt men in the Roman army before the beginning of the war using *fuere* 'there were' (360a); but when he tells us about a certain Numidian who had the misfortune to be in Rome at the time of Iugurtha's visit and who was killed by the Numidian king, he uses *erat* 'there was' (360b). Sallust uses the perfect to give an overview of a past situation and the imperfect to describe the background to a past event.[352]

350. See, e.g., Kühner & Stegmann (1955 § 33.8), H. Rosén (1980: 48), and Pinkster (1995: 307), who all mention this quotation.

351. See, e.g., Comrie (1978: 16–40) and Johanson (2000: 152–154); cf. Hofmann & Szantyr (1965 §§ 168, 176, 178), Chausserie-Laprée (1969: 383–393), Mellet (1988: 97–100), Pinkster (1995: 307–310), Kroon and Rose (1996), and Oldsjö (2001: 472–488); cf. Haverling (2001: 355–362).

352. See Haverling (1998: 366–369); cf. Mellet (1988: 160–165).

(360) a. Sall. *Iug.* 8,1: *ea tempestate in exercitu nostro* ***fuere*** *complures noui atque nobiles quibus diuitiae bono honestoque potiores erant*
'at that time there *were* a great many in our army, both new men and nobles, who cared more for riches than for virtue and self-respect'

b. Sall. *Iug.* 35,1: ***erat*** *ea tempestate Romae Numida quidam nomine Massiua, Gulussae filius, Masinissae nepos, qui … profugus ex patria abierat*
'there *was* in Rome at that time a Numidian named Massiva, a son of Gulussa and grandson of Massinissa, who had fled from Africa'

The perfect is the tense normally used in a sequence of successive events or situations ((292)–(293) above, Section 4.1.1). In the dialogue *Brutus*, Cicero enumerates many eloquent men from different times. Generally he uses the perfect tense when he mentions a new person, as for instance in *temporibus illis fuit* 'there was at that time' (361a), but he switches to the imperfect tense when he stresses that one person was around at the same time as someone or something else, as for instance in *erat isdem temporibus* 'at the same time there was' (361b).

(361) a. Cic. *Brut.* 96–97: *Q. enim Pompeius non contemptus orator* temporibus illis ***fuit***, *qui summos honores … est adeptus. Tum L. Crassus multum* ***potuit*** *non eloquentia, sed dicendo tamen*
'of these Quintus Pompeius was for his time no mean orator, who gained the highest honors. Of the same time was Lucius Cassius, whose words, though he was not eloquent, exercised great influence'

b. Cic. *Brut.* 79: ***erat*** isdem temporibus *Ti. Gracchus P.f.*, *qui bis consul et censor* fuit, *cuius est oratio Graeca apud Rhodios*
'to the same period belonged Tiberius Gracchus, son of Publius, who was twice consul and censor: we have his oration, written in Greek, before the people of Rhodes'

The normal way to start a new story is thus in the perfect. The Early and Classical Latin *fuit quondam* 'once upon a time there was' corresponds

to expressions with the imperfect in Romance languages, for instance the Italian formula *C'era una volta*. This expression occurs in for instance Plautus (362a) and Petronius (362b). It was possible, however, for an author to change the perspective somewhat, as Petronius does in (363a), by starting with a clause in the imperfect which leads to a consecutive *ut*-clause, which provides the necessary temporal anchoring of the situation. The striking parallel between a passage from around 200 BCE (362a) and another passage from the later second century CE (363b), with exactly the opposite choice of tenses, has been adduced as evidence of the change in the relationship between the perfect and imperfect tenses in later Latin.[353] A more conservative and cautious interpretation, however, would be that the author in (363b) simply chose to present the fact that the couple had three daughters as the main piece of information and the fact that they were king and queen as background information.

(362) a. Plaut. *Stich.* 539–340: ***fuit*** *olim, quasi ego sum, senex; ei filiae / duae* ***erant****, quasi nunc meae sunt*
'once upon a time there was an old man – the same as I am. He had two daughters – the same as I have now'

b. Petron. 59,2: *Diomedes et Ganymedes duo fratres* ***fuerunt****. horum soror* ***erat*** *Helena*
'Diomedes and Ganymede were two brothers. Helen was their sister'

(363) a. Petron. 111,1: *matrona quaedam Ephesi tam notae* ***erat*** *pudicitiae, ut uicinarum quoque gentium feminas ad spectaculum sui* euocaret. *haec ergo cum uirum* extulisset … *in conditorium etiam* prosecuta est *defunctum* …
'there was a married woman in Ephesus of such famous virtue that she drew women even from the neighboring states to gaze upon her. So when she had buried him she followed the dead man even to his resting place'

353. See Ronconi (1968: 62–63).

b. Apul. *met.* 4,28: ***erant*** *in quadam ciuitate rex et regina; hi tres numero filias forma conspicuas* ***habuere***
'in a certain city there was a king and a queen and they had three beautiful daughters'

The use of the "historical present" is rather free in Ancient Greek and Latin, where the texts sometimes display a striking mixture of tenses (364a–b). Scholars have discussed the semantic and stylistic value of this phenomenon. Often the present seems to replace the perfect (364c); in general, however, a narration usually starts with a past tense form or with some other reference to the pastness of the situation. Temporal clauses introduced by a number of conjunctions, for instance *ubi* 'when', often take the perfect ((323) above, Section 4.1.3) or the historical present indicative ((364d); (98) above, Section 3.1.1).[354]

(364) a. Cic. *Verr.* II 1,66: *et simul seruis suis Rubrius ut ianuam* clauderent *et ipsi ad foris* adsisterent ***imperat***
'at the same moment Rubrius told his slaves to close the front door and stand on guard at the entrance'

b. Liv. 28,31,3: *Mago … nuntios Carthaginem* ***mittit*** *… qui …* ***hortentur*** *ut auxilia* mitterent
'Mago sent messengers to Carthage to urge them to send reinforcements'

c. Ter. *Phorm.* 862–867: *puer ad me* ***adcurrit*** *…, / …* ***respicio***, ***rogo*** */ …; / … / … hoc ubi ego* audiui, *ad fores / … ire* perrexi, *accessi, astitit*
'the slave boy ran up to me, I turned round and asked. When I heard that, I continued towards the doors, I reached them, stood still'

354. See Kühner & Stegmann (1955 § 31.2, 3, 5 & 6), Hofmann & Szantyr (1965 § 171), Dressler (1968: 118–123), and Pinkster (1995: 310–312); cf., e.g., Oldsjö (2001: 345–378); cf. Moore (1934: 106).

d. Liv. 4,56,8: *quae* ubi . . . ***nuntiantur*** *Romam, senatus extemplo . . . dictatorem dici iussit*
'when these tidings were carried to Rome, the senate forthwith ordered a dictator to be appointed'

Another particular feature is the "historical infinitive", which occurs in vivid and excited descriptions. In narratives it often corresponds to the narrative perfect in that it is often used of several situations or actions following one another ((365a); cf. (292) above, Section 4.1.1). A traditional interpretation of this phenomenon was that it has an ingressive function; Quintilian (*inst.* 8,6,21) explained it as an ellipse of for instance *coepi*. In certain cases the function thus seems to be basically perfective. However, in some cases scholars have thought that it may have a descriptive or even "conative" function (365b), and in that case the function seems to be imperfective rather than perfective. The historical infinitive seems to resemble the historical present in that it adds intensity (and thereby also a feature like iterativity) to the description of the events.[355]

(365) a. Cic. *Verr.* II 4,39: (Verres) ***minitari*** *Diodoro,* ***uociferari*** *palam, lacrimas interdum uix* ***tenere***
'Verres threatened the absent Diodorus, uttered open cries of rage, and now and then even shed tears'

b. Liv. 4,51,6: (nobilitatem) . . . *ne uacuum quidem agrum nuper ex hostibus captum plebi* **diuidere**
'the nobility would not even divide among the plebeians the unoccupied ground which had recently been taken from the enemy'

The use of the historical infinitive is relatively common in Early and Classical Latin but seems to decrease in Late Latin.[356]

The opposition between foreground and background is strongly emphasized in Classical Latin, and it is a main feature in the narrative texts: the

355. See Moore (1934: 89); Kühner & Stegmann (1955 § 34); and Pinkster (1995: 312); cf. Oldsjö (2001: 378–391); see also Dressler (1968: 105–112, 123–155) and Viljamaa (1983: e.g. 95–99).

356. See Hofmann & Szantyr (1965 § 200.b Zus. c).

interplay between the perfective overview provided by the perfect, the imperfective description provided by the imperfect, and the preceding situation or action indicated by the pluperfect creates the framework around which the story is told. The historical infinitive and the historical present are marked elements which render the description more colorful and vivid, since they bring the reader closer to the past events or situations that are described.[357]

4.2 The development in later Latin

In a growing number of cases, Late Latin chooses the imperfect tense rather than the perfect preferred in the earlier periods.[358]

4.2.1 Actionality and viewpoint

The changes in the viewpoint system in Late Latin are closely connected with the changes in the actional system. In Late Latin, the semantic functions of *suadeo* and *persuadeo* are fused, and the winner is *persuadeo* (cf. (79) above, Section 2.2.4). There are only two examples of *persuadeo* in the imperfect indicative before 200 CE ((354) above, Section 4.1.6), but the number of examples grows considerably in Late Latin; and in some cases, for instance in a passage from around 400 CE, it occurs in what seems to be a "conative" use (366). Another effect of this development is that the opposition between the unprefixed stative *tacui* and the prefixed dynamic *conticui* is blurred. In texts from the fourth century CE, *tacui* often means 'stopped talking' (367a); there are also some examples of hypercorrect use of the prefixed forms, for instance, *conticui* in the sense 'have been silent' (367b).[359]

357. See, e.g., Fleischman (1990: 75–81). For a discussion of the tenses in Pliny's letters, see H. Rosén (1980); for a discussion of Caesar, see Oldsjö (2001).
358. See Haverling (2001, 2005b).
359. See Haverling (2000: 224–225, 230–241; 2001: 363; 2003a: 125–126).

(366) Hier. *adv. Iovin.* 1,45 fin.: *nutricem quae illi secundas nuptias* ***persuadebat***, *occidit*
'she killed her wet-nurse, who *tried to persuade* her to marry a second time'

(367) a. Amm. 16,6,3: *et Dorus euanuit, et Verissimus ilico* ***tacuit***
'and Dorus disappeared and Verissimus at once *fell silent*'
b. Symm. *epist.* 5,89: *hucusque* ***conticui***
'I *have kept silent* so far'

As a result of the changes in the actional system, there is also a change in the relationship between the perfect and imperfect tenses. In Classical Latin, the perfect gives an overview of past situations and puts a situation or action in the foreground of the story, whereas the imperfect emphasizes the backgrounding of an action.[360] But when a perfect like *tacui* becomes common in the ingressive function (367a), its semantic function becomes ambiguous; and as a result there is a growing tendency to replace it with the imperfect in the function of giving an overview of a past situation. The imperfect is therefore often found in descriptions of how someone reacted with silence to a statement made by another, for instance in the Vulgate when Jesus does not answer questions put to him by the high priest (368a) and in Augustine when he describes how participants in a discussion are rendered speechless by the statements made by others (368b). In cases like (368), Cicero used *tacui* ((341b) above, Section 4.1.5). The border between the semantic fields of the perfect *tacui* and the imperfect *tacebam* thus seems to have moved slightly in the later period. As a result of these changes, some variation is found in the way the Greek aorist in the Septuagint is translated (369a); a mid-twentieth-century English translation of the Hebrew text has the past tense (369b). The choice of the perfect in (370a) is probably due to a dynamic ingressive interpretation of the aorist, which would have required a prefixed form like

360. See Haverling (2001: 355–362); cf. also, e.g., Comrie (1978: 16–40) and Johanson (2000: 152–154); and Hofmann & Szantyr (1965 §§ 168, 176, 178), Pinkster (1995: 307–310), and Oldsjö (2001: 472–488).

conticui in Classical Latin, whereas the choice of the imperfect is probably the result of a comprehensive and stative interpretation of the aorist (370b).[361]

(368) a. Vulg. *Marc.* 14,60–61: *et exsurgens summus sacerdos in medium interrogauit Iesum dicens: 'Non respondes quicquam ad ea quae tibi obiciuntur ab his?' Ille autem* ***tacebat*** *et nihil respondit*
'and the high priest stood up in the midst, and asked Jesus, "Have you no answer to make? What is it that these men testify against you?" But he was silent and made no answer'

b. Aug. *ord.* 1,7,19: *'nam quaero, ex te, quaeso', inquit, 'iustusne sit Deus?' –* ***Tacebat*** *ille, nimis, ut postea retulit, admirans et horrens subito condiscipuli … sermonem …*
' "because I ask you, please, to tell me," he said, "if God is just?" – Then the other one *remained silent*, as he told me afterward, because he was surprised and horrified by the words of his fellow student'

(369) a. LXX *psalm.* 38,3: ἐκωφώθην καὶ ἐταπεινώθην καὶ **ἐσίγησα** ἐξ ἀγαθῶν

b. (Revised Standard Version) 'I was dumb and silent, I held my peace to no avail'

(370) a. Vulg. *psalm.* 38,3 'Iuxta LXX': *obmutui et humiliatus sum et* ***silui*** *a bonis*
Vet. Lat. cod. 300 *Psalm.* 38,3: *obsurdui*

361. See Haverling (1998: 370–376; 2001: 362–367; 2003a: 127–129; 2005a, 2005b); cf. Johanson (2000: 81–82). There are a few remarks on the "aoristic" use of the imperfect tense in the Late Latin translations from Greek in Hofmann & Szantyr (1965 §§ 168d, 177 Zus. a and b); and Ehrismann (1886), Ronconi (1968: e.g. 62–63), Kiss (1982: 11), and Stotz (1998–2000, 4 § 58.1) were among those who suggested that there were changes in the relationship between the tenses in the later periods of Latin; but H. Rosén (1980: 87), Pinkster (1995: 309–310; 1998), and Kroon and Rose (1996) disagreed.

b. Vet. Lat. *psalm.* 38,3 ap. *Vita Anton.* 27 (41,7): *'cum asteterit peccator in conspectu meo, insurdabar et humiliabar et **tacebam** a bonis'*
Vet. Lat. cod. 136 *Psalm.* 38,3: *mutus **tacebam***

The development in the actional system affects not only related verbal pairs like *taceo/tacui* and *conticesco/conticui*, but also the verbal system at large, as illustrated by the development of *habui* 'I have had, I had'. In the sense 'she bore a son', Classical Latin has such expressions as *filium genuit*, whereas *filium habuit* is stative and means 'she had (was the mother of) a son' ((349)–(350) above, Section 4.1.5). But French and Italian have phrases like *elle/il eut un enfant* and *ebbe un bambino* in the sense 'bore/fathered a child', which shows that *habui* acquired a dynamic function in Vulgar Latin.[362] In Augustine, around 400 CE, *filium genuit* is still the normal expression for 'fathered a son' (371b) and *filium habuit* still means 'had (was the father of) a son' (371a). In (371b) the expression *genuit filium* 'fathered a son' occurs with indications regarding the age of the father on the occasion. However, in the sixth-century translation of Josephus's *Jewish War*, there are several examples of ingressive use of a perfect like *habui*, as in *filium habuit* 'fathered a son' with an indication of the age of the father on that occasion (372a). In the sense 'had (was the father of) a son' the imperfect tense is used (372b). The system thus seems to correspond to that of Romance, for example in Italian and French (373).[363]

(371) a. Aug. *civ.* 2,3: *Metellus enim Romanorum laudatissimus, qui **habuit** quinque filios consulares, etiam rerum temporalium felix fuit*
'Metellus, a man most highly esteemed among the Romans, who had five sons that became consuls, was also fortunate in the goods of this world'

362. See Haverling (2000: 242).
363. See Rohlfs (1949–1954, 3 § 672); among the cited examples are *ebbi una lettera* 'I received a letter' and *avevo una lettera* 'I had (owned) a letter'.

b. Aug. *civ.* 15,2: *ubi Adam non ducentorum triginta, sed centum triginta annorum fuisse reperitur,* quando *tertium* ***genuit*** *filium* 'where it is made clear that Adam was not two hundred and thirty but a hundred and thirty years old when he became the father of a third son'

(372) a. Joseph. *antiq.* 1,6,5 (149): *Reu uero Seruch* ***habuit***, *cum esset annorum centum triginta. Isdem uero annis* ***habuit*** *Phalech Rum*
(Ῥοῦμος δὲ Σεροῦγον ἔτη τριάκοντα γεγονὼς πρὸς τοῖς ἑκατόν· ἐν δὲ τοῖς αὐτοῖς ἔτεσι καὶ Ῥοῦμον Φάλεγος ἔσχεν)
'Reu fathered Seruch when he was 130 years old and at the same age Phalech begat Rum'

b. Joseph. *antiq.* 2,13,1 (277): *sumensque Sefforam quam* ***habebat*** *uxorem … et filios quos* ***habebat*** *ex ea …. tetendit ad Aegyptum*
(καὶ παραλαβὼν τὴν Σαπφώραν ἣν γεγαμήκει … καὶ τοὺς ἐξ αὐτῆς παῖδας … ὥρμησεν εἰς τὴν Αἴγυπτον)
'he took Seffora whom he had for wife, and the children he had with her with him and went to Egypt'

(373) It. *aveva un bambino* 'had (was the parent of) a child'
ebbe un bambino 'bore/fathered a child' (alt. *ha avuto un bambino*)
cf. Fr. *elle eut un enfant* 'she bore a child'

The tendency to use the perfects of stative verbs in an ingressive sense seems, in other words, to grow stronger in later centuries: following the distinction proposed by Bybee, Perkins, and Pagliuca (1994: 91–95), we can say that the Latin perfect moves from its position as a generic past tense to a perfective past tense. As a result, the imperfect tense of stative verbs tends to be used in some cases in which the perfect was used in earlier centuries.

4.2.2 Temporal adverbials

Other examples of the continued blurring of the opposition between the perfect and imperfect tenses are found with durative temporal adverbials. In the later periods the imperfect tense is sometimes used to give an overview of a past situation, as in Ammianus Marcellinus, who often uses the imperfect

with durative temporal adverbials where Classical Latin prefers the perfect ((374a); cf. (307)–(308) above, Section 4.1.3) and who sometimes seems to use the perfect (374b) and the imperfect (374c) in much the same semantic function.[364] Compare the use of the imperfect with *diu* in Ammianus with similar passages translated from Greek, such as the Vulgate (375). The Greek text corresponding to (375a) has the aorist and not the imperfect tense, and (375b) has a periphrastic expression in both the Latin translation and the Greek original (cf. (395)–(401) below, Section 4.2.4):[365]

(374) a. Amm. 20,6,5: ***pugnabatur*** *euentu ancipiti* diebus aliquot
'the battle *raged* for several days with uncertain outcome'
b. Amm. 22,3,6: *Florentius* … diu ***delituit***
'Florentius *remained hidden* for a long time'
c. Amm. 28,1,49: *Abienus apud Anepsiam* diu ***delitiscebat***
'Abienus *remained hidden* for a long time in the house of Anepsia'

(375) a. Vulg. *Luc.* 1,24: *post hos autem dies concepit Elisabeth uxor eius et* ***occultabat se*** mensibus quinque …
(NT *Luc.* 1,24 : μετὰ δὲ ταύτας τὰς ἡμέρας συνέλαβεν Ἐλισάβετ ἡ γυνὴ αὐτοῦ, καὶ **περιέκρυβεν** ἑαυτὴν μῆνας πέντε)
'after these days his wife Elizabeth conceived, and for five months she hid herself'

364. The French translations of the passages in (374) have the passé simple: cf. Fontaine (1996: 18, 94) and Marié (1984: 160); this corresponds to the translations by Rolfe (1956–1958, 2: 37, 194; 3: 117) and Seyfarth (1968–1971, 2: 99; 3: 11; 4: 109). On *delitesco* 'be hiding', see Haverling (2000: 65, 133).

365. In the eighth century there are more examples of the overlap between the perfect and imperfect with durative temporal adverbials in Paulus Diaconus (cf. Paul. Diac. *Hist. Lang*. 1,16: *per tempus aliquod* ***commorabantur*** 'they remained for some time' and 1,19: *aliquantis* ***commorati sunt*** *annis* 'they remained for some years'); the passato remoto appears in an Italian translation of both passages: see Zanella (1991: 171, 175). Stotz (1998–2000, 4 § 58) mentions the use of the imperfect tense in a "punctual" sense in Medieval Latin (e.g., Arnold. Lub. *Greg*. 2,10,19–22: *forte … casu … nolens ledebat filium*; Hrotsv. *Mar*. 212: *cum sua caelestes primum consortia ciues olim terrigenas promittebant habituros*; Liutpr. *Antap*. 2,28 p. 51 3–6: *rex nonulla … dicere cuperat, cum … nuntius … nuntiabat*; and Hrotsv. *Abr*. 3,11: *postquam … huius solamine uisionis temperabam tristitiam prioris …*).

b. Vulg. *act.* 16,12: ***eramus*** *autem in hac urbe* diebus aliquot ***commorantes***
(NT *act.* 16,12: **ἦμεν** δὲ ἐν ταύτῃ τῇ πόλει **διατρίβοντες** ἡμέρας τινάς)
'we remained in this city some days'

In the many translations from later centuries, there are numerous cases in which one translation chooses the imperfect and another the perfect to translate very similar or identical passages (376). In (376b) and (377), however, the little word *sicut* 'as' may have triggered the use of the perfect; but even so there would still be a new use of the imperfect with a durative temporal adverbial in (376a). From around 400 CE more examples are found in texts translated from Greek. In (378a) the Vulgate has the expression *hoc … faciebat multis diebus* 'this she did for many days'; the Greek text has a similar construction with the imperfect. In (378b) there is a quotation of the same passage of Origen, which was translated into Latin by Rufinus, who chose the imperfect tense.[366]

(376) a. Vulg. *Ion.* 2,1: *et* ***erat*** *Iona in uentre piscis* tribus diebus et tribus noctibus
(LXX *Jon.* 2,1: καὶ ἦν Ἰωνᾶς ἐν τῇ κοιλίᾳ τοῦ κήτους **τρεῖς ἡμέρας καὶ τρεῖς νύκτας**)
'and Jonah was in the belly of the fish three days and three nights'

b. Vulg. *Matth.* 12,40: *sicut enim* ***fuit*** *Ionas in uentre ceti* tribus diebus et tribus noctibus *sic erit Filius hominis in corde terrae tribus diebus et tribus noctibus*
(NT *Matth.* 12,40: ὥσπερ γὰρ **ἦν** Ἰωνᾶς ἐν τῇ κοιλίᾳ τοῦ κήτους **τρεῖς ἡμέρας καὶ τρεῖς νύκτας**, οὕτως ἔσται ὁ υἱὸς τοῦ ἀνθρώπου ἐν τῇ καρδίᾳ τῆς γῆς τρεῖς ἡμέρας καὶ τρεῖς νύκτας)

366. For more examples of Rufinus's use of the perfect and imperfect tenses, see Haverling (1998: 372–373).

'for as Jonah was three days and three nights in the belly of the whale, so will the Son of man be three days and three nights in the heart of the earth'

(377) Zeno *tract.* 1,34,8: *sicut enim Ionas* tribus diebus et tribus noctibus ***fuit*** *in uentre ceti*
'just as Jonah was in the belly of the whale for three days and three nights'

(378) a. Vulg. *act.* 16,17–18: *haec* (puella habens spiritum pythonem) *subsecuta Paulum et nos clamabat dicens … Hoc autem* ***faciebat*** multis diebus
(NT *act.* 16,17–18: αὕτη κατακολουθοῦσα τῷ Παύλῳ καὶ ἡμῖν ἔκραζεν λέγουσα … τοῦτο δὲ **ἐποίει ἐπὶ πολλὰς ἡμέρας**)
'she followed Paul and us, crying. And this she did for many days'

b. Rufin. *Orig. in num.* 16,7: *et clamabat dicens … Et hoc* ***faciebat*** per dies multos
'and she cried and said …. And this she did for many days'

However, the use of the tenses with durative temporal adverbials found in literary Late Latin usually corresponds to the Classical Latin system. This seems to be the case, for instance, in the numerous writings of Augustine, who uses the perfect to give an overview of a past situation ((379a), (379c)) and the imperfect with an expression of determinate duration (379a) and to indicate "anterior continuing" (379b).[367]

(379) a. Aug. *conf.* 5,6 in.: *et* per annos ferme ipsos nouem, *quibus eos animo uagabundus* ***audiui***, *nimis extento desiderio uenturum* ***expectabam*** *istum Faustum*
'and by the space almost of those nine years, during which with an unsettled mind I had been a disciple of them (the Manichaeans), I was expecting the coming of this Faustus with too strong desire'

367. Cf. Haverling (2001: 365–367; 2005a, 2005b, 2006a, 2008).

b. Aug. *cons. evang.* 3,25,84: *crebra enim* ***erat*** *eius cum illis conuersatio* per dies quadraginta *priusquam ascendisset in caelum. non tamen eis* per omnes quadraginta continuos ***apparuerat***
'he had often been together with them during the forty days before he had ascended into heaven. But he had not shown himself to them for all those forty days'

c. Aug. *cons. evang.* 3,25,84: *qui simul, inquit,* ***manducauimus*** *et* ***bibimus*** *cum illo, posteaquam resurrexit a mortuis,* per dies quadraginta, *non quod cotidie per dies quadraginta cum illo manducassent et bibissent*
'we who at the same time, he said, ate and drank with him for forty days after he rose from the dead, not because they had eaten and drunk with him for forty days'

If there is thus a difference in this respect between Augustine and his somewhat older, originally Greek-speaking contemporary Ammianus Marcellinus, it is perhaps because the latter reflects the Latin spoken in their day, rather than because of any lack of knowledge of Latin; whereas a professor of Latin literature and rhetoric like Augustine had been trained from childhood to avoid such elements.[368]

About a hundred fifty to two hundred years later, the number of cases in which the imperfect tense is combined with durative temporal adverbials has grown. In the sixth century, a durative temporal expression is often accompanied by a participle and the imperfect tense: there are such examples in Gregory of Tours (380a–b) and in the *Itinerarium Alexandri* (380c). There seems to be a certain love for vivid and colorful descriptions in Late Latin narrative texts, and this circumstance sometimes renders it difficult to determine whether this is a real change in the language or merely a change in style.

368. Ammianus was a man of great culture who had studied Greek rhetoric in his home town, Antioch; his familiarity with Latin literature was considerable, but he had learned the language above all during his long-term career as a military officer: see Viansino (2001: cxxv–cxxxiv).

(380) a. Greg. Tur. *Mart.* 2,54: per omne tempus festiuitatis *humo prostrata* ***orabat***
'for the whole time of the festival she lay prostrate on the ground praying for help'

b. Greg. Tur. *Franc*. 5,6: *ubi* per duos aut tres menses ***consistens*** *et* ***ieiunans*** *assiduae, lumen ut reciperet,* ***flagitabat***
'there he was fasting and earnestly and constantly asking that he get his sight back'

c. *Itin. Alex*. 116 (790): diu *secum satellitibus conspirantibus rem pleni exercitus* ***agitabat***
'for a long time he thought about the thing regarding the full army, supported in this by his comrades'

As the imperfect tense became more common in the general function of providing an overview of a situation in the past, it gradually lost its function of indicating "anterior continuing" in the past. In Classical Latin the imperfect tense occurs with durative temporal adverbials with or without *iam* 'already' ((307b) above, Section 4.1.3), but in the sixth century CE there seems to be a tendency to use the pluperfect with a durative temporal adverbial like *diu* 'for a long time' (381a) and the imperfect only when it is combined with *iam* 'already', as in *iam diu* 'already for a long time' (381b). There seems to be another example of this tendency to use the pluperfect in a seventh-century text from Spain, the *Vitas Sanctorum Patrum Emeritensium*,[369] where the expression *diu desiderauerat* (382a) corresponds to the *diu cupiebant* in Classical Latin (382b).

(381) a. Greg. Tur. *Franc*. 2,3: *Honoricus uero post tantum facinus arreptus a daemone, qui* diu *de sanctorum sanguine* ***pastus fuerat***, *propriis se morsibus laniabat, in quo cruciatu uitam indignam iusta morte finiuit*
'but after such a deed Honoricus was taken hold of by a demon, who for a long time had fed on the blood of holy men, and he started biting himself and in that suffering he ended his unworthy life in a fair way'

369. See Garvin (1946: 188–189).

b. Greg. Tur. *Franc.* 5,5: *quae dum aguntur, ipse, quia* iam diu *epilenticus* ***erat***, *ab hoc morbo correptus, asperius ex sensu factus et per dies duos assiduae dans mugitum, tertia die spiritum exalauit*
'as this is going on he, since he had for a long time been epileptic, is hit by this illness and loses consciousness and for two days he moaned all the time, and on the third day he died'

(382) a. *VSPE* 4,10,8: *illo benigne reddente atque illa cum gaudio quae* diu ***desiderauerat*** *recipiente*
'after he had graciously returned and she had joyfully received what she had so long desired'

b. Liv. 24,29,3: *nam et illis, quod iam* diu cupiebant, *nouandi res occasio data est*
'for one party was given an opportunity for revolution, which they had wished for for a long time'

In Classical Latin, the pluperfect occurs with a durative temporal adverb when the situation thus described clearly belongs to the past and does not continue into the present ((238) above, Section 3.3.2). The tendency to use the pluperfect rather than the perfect in constructions with *paene* 'almost' and *postquam* 'after' first appears in Early and Classical Latin and grows stronger in the later centuries ((276) and (280) above, Section 3.3.5).[370]

4.2.3 Overview and backgrounding

Sometimes in Late Latin there seems to be an overlap between the perfect and the imperfect tenses. In the Old Testament there are long lists of kings, containing their age as they came to power and the length of their reign. Almost always the age is indicated in a clause with the imperfect tense (383a), but in one case with the perfect (383b). Somebody's age at a certain moment in the past is a non-permanent state. Permanent states, like the identity of somebody's parent, are usually indicated with a perfect (384a), but the imperfect may also be found (384b).

370. See Hofmann & Szantyr (1965 §§ 183.b, 322.a); cf. Kühner & Stegmann (1955 §§ 35.4 Anm. 1, 44.2 Anm. 2).

(383) a. Vulg. *II par.* 24,1: *septem annorum **erat** Ioas* cum regnare coepisset *et quadraginta annis regnauit in Hierusalem*
'Joash was seven years old when he became king and he reigned for forty years in Jerusalem'

b. Vulg. *II par.* 21,20: *triginta duum annorum **fuit*** cum regnare coepisset *et octo annis regnauit in Hierusalem*
'he was thirty-two years old when he became king and he reigned for eight years in Jerusalem'

(384) a. Vulg. *I par.* 2,17: *Abigail autem genuit Amasa cuius pater **fuit** Iether Ismahelites*
'Abigail bore Amasa, and the father of Amasa was Jether the Ishmaelite'

b. Vulg. *III reg.* 11,26: *Hierobam quoque filius Nabath Ephratheus de Sareda, cuius mater **erat** nomine Sarua mulier uidua, leuauit manum contra regem*
'Jeroboam the son of Nebat, an Ephraimite of Zeredah, whose mother's name was Zeruah, a widow, lifted up his hand against the king'

There seems to have been a feeling that the use of the perfect in the function of giving an overview of a past situation was the better choice. In several cases the Vulgate and the *Vetus Latina* manuscripts disagree as regards the choice of the tense; in (385a) the *Vetus Latina* has the imperfect, whereas the Vulgate prefers the perfect (385b).[371] There is thus a growing tendency to use the imperfect tense to translate a Greek aorist. An example with a durative temporal adverb is found in *occultabat se mensibus quinque* 'she hid for five months' ((375) above, Section 4.2.2) and another in *primo ... florebat* 'first it flourished' in Rufinus's translation of Eusebius (386).[372]

371. On the relationship between written norm and grammar in early Romance, see Fleischman (1990: 66–69).

372. See Hofmann & Szantyr (1965 § 168 Zus. d), who mention *Vitae patr*. 3,216: *uitam suam **consumebat*** 'he spent his life, wasted his life' (Gk. κατηνάλωσε); cf. also Haverling (1998: 371–376; 2005b: 167–169). Of the manuscripts containing Fredegar's *Chronicle* (e.g., Fredegar *chron*. 1,14 etc.), some have the perfect (*prophetauit*, *regnauit*) and others the imperfect (*prophetabat*, *regnabat*): cf. Kiss (1982: 11).

(385) a. Vet. Lat. *Luc.* cod. 5 19,20–21: *domine, ecce mna tua quam* ***habebam*** repositam *in sudario, quoniam* ***timebam*** *te, homo es enim austeris*

b. Vulg. *Luc.* 19,20–21: *domine, ecce mna tua quam* ***habui*** repositam *in sudario.* ***Timui*** *enim te quia homo austeris es*
'Lord, here is your pound, which I kept laid away in a napkin; for I was afraid of you, because you are a severe man'

(386) Rufin. *hist.* 4,26,7: *filosofia haec … primo quidem* ***florebat*** *apud barbaros. Introducta autem etiam Romanae uestrae conuersationi Augusti temporibus*
(Euseb. *hist. eccl.* 4,26,7: ἡ γὰρ … φιλοσοφία πρότερον μὲν ἐν βαρβάροις ἤκμασεν)
'this philosophy was first of importance among foreigners'

In (383) there are nonpermanent states, and in such cases the imperfect is more common, but in (384) there is a permanent state and in such cases the perfect is far more common. When referring to permanent states such as somebody's nationality or birth, Gregory of Tours generally prefers the perfect (387a), and he uses the imperfect in a backgrounding function, as in causal clauses (387b). But when the permanent state is the location of something, for instance a lake or a town, there is a very strong tendency to use the imperfect tense (388a). The perfect in this function is very rare and does not seem to differ semantically from the imperfect (388b).

(387) a. Greg. Tur. *Franc.* 10,31: (Martinus) ***fuit*** *autem de regione Pannoniae, ciuitate Sabariae*
'Martin was from Pannonia, from the town of Sabaria'

b. Greg. Tur. *Franc.* 8,15: *quia* ***erat*** *genere Langobardus*
'because he was a Langobard by birth'

(388) a. Greg. Tur. *Franc.* 8,25: *in alia uero insola, quae est proxima ciuitate Veneticae,* ***erat*** *stagnum ualidum piscibusque refertum*
'in another island, which is close to the town of Vienne, there was a big lake full of fish'

b. Greg. Tur. *Franc.* 9,5: (prodigium) *usque Burdegalensem terminum peraccessit, non praetermittens ullam urbem, quae* ***fuit*** *in medio*
'and this prodigy got as far as the frontier of Burdigala and did not omit any town that was in between'

The perfective overview still holds its position in such cases as (387a), where we are told about Martin's national identity. The location of a building or lake or mountain may more easily be regarded as background information and therefore seems to occur with greater frequency in the imperfect tense (cf. *fuit* vs. *erat quondam* 'once upon a time there was' in (404) below, Section 4.2.5).[373]

In Classical Latin, pluri-occasionality in the past is often described by the imperfect tense, but it might also be indicated by the perfect, for instance by *solitus est* 'used to' ((301)–(304) above, Section 4.1.2). In Late Latin, the perfect rather than the imperfect is still found with expressions like *quotienscumque* 'whenever' (389), as in Classical Latin (cf. (304) above, Section 4.1.2).

(389) *Itin. Eger.* 19: quotienscumque ***uoluerunt*** *uenire et expugnare hanc ciuitatem hostes, haec epistola* prolata est *et* lecta est *in porta*
'whenever the enemies wanted to come and capture this city, this letter was brought forward and it was read in the gate of the city'

In later Latin, however, *solitus est* is less common than earlier and often seems to be used in the present perfect sense 'has been in the habit of' (390a) or even in the present sense 'is in the habit of, is common' (390b); and although *solitus est* is sometimes used as a past tense, as in the fifth-century pagan Macrobius (391a), it now competes with *solebat* in the perfective past function of providing an overview of a past situation (391b); some hundred-fifty years later, in the sixth century in Gregory of Tours for example, the former

373. This development toward the use of the imperfect tense rather than the perfect in permanent states in the past was not completed in Early Romance. In Old French, the passé simple was still used in this way (cf., e.g., *Alex.* 15: *Eufemien – si* ***out*** [PS] *a num li pedre* 'Eufemien – that was his father's name'); in the later Middle Ages, however, there is a growing tendency to use the imperfect tense instead: see Fleischman (1990: 42–43).

pluperfect *solitus eram* has become the only choice in the past tense sense 'used to' ((391c); cf. (279) above, Section 3.3.5). Similarly, of the iterative verbs like *uentito* 'come often' (392a) and *factito* 'do repeatedly' (392b), it is the imperfect tense and not the perfect that occurs (cf. (300) above, Section 4.1.2).

(390) a. Hier. *epist.* 117,12: *unde et de scripturis pauca perstrinxi nec orationem meam, ut in ceteris libris facere* ***solitus sum***, *illarum floribus texui*
'therefore I have kept the discussion of the Scriptures short and not, as I have been accustomed to do in the other books, embellished my style with their blossoms'

b. Hier. *in Os.* 2,9 line 145: *et in hoc loco error* ***est solitus***
'here it is common to commit a mistake'

(391) a. Macr. *sat.* 2,1,15: *Marcus etiam Cato ille Censorius argute iocari* ***solitus est***
'even the famous Marcus Cato the Censor used to make witty jokes'

b. Iul. Vict. *rhet.* p. 3 line 4: *Socrates quoque dicere* ***solebat*** *omnes in eo, quod scirent, satis esse eloquentes*
'and Socrates used to say that everybody was quite eloquent when talking about matters that were familiar to them'

c. Greg. Tur. *Franc.* 2,40: *in hanc arcellolam* ***solitus erat*** *pater meus numismata auri congerere*
'my father used to put his golden coins in this little chest'

(392) a. Aug. *mor. Manich.* 2 col. 1375 line 41: *an uero illius etiam sancti, ad cuius disputationes in ficariorum uicum* ***uentitabamus***, *tantum illud flagitium proderetur, si uirginem sanctimonialem mulierem tantum, non et praegnantem facere potuisset?*
'would the great shame of that man, who was even a man of virtue to whose discussions in the Street of the Fig-workers we used to go, be made known, if he had only been able to make a virtuous virgin a woman and not also pregnant?'

b. Aug. *bon. coniug.* 25,33: *neque contra morem, quia illis temporibus ea* ***factitabantur****; neque contra praeceptum, quia nulla lege prohibebantur*
'and it was not against custom, since in those days those things were done; and it was not against the rules, since it was not forbidden by a law'

In Late Latin, the imperfect was thus gradually expanding its territory at the expense of the perfect in the function of giving an overview of a past situation.[374] In the more literary texts, however, the use of the imperfect tense is somewhat more restricted than in the less literary texts.

4.2.4 Progressivity

The clash between the imperfective viewpoint and telic or momentaneous actionality creates some special effects, such as the imperfective paradox (cf. (352) above, Section 4.1.6). Examples are found in Late Latin as well, for instance in Rufinus's translation of Eusebius's *History of the Church* where there is an instance of *ueniebat* in an expression meaning 'was on the way to, but did not arrive' (393); in this case the Greek text has a periphrastic expression.

(393) Rufin. *hist.* 7,30,5: *denique et nunc beatus Firmilianus* ***ueniebat*** *Antiochiam, et cum Tarsum usque peruenisset … nuntiatus est nobis excessisse de mundo*
(Euseb. *hist. eccl.* 7,30,5: ἔμελλεν δὲ καὶ νῦν ὁ Φιρμιλιανὸς εἰς τὴν Ἀντιόχειαν διαβήσεσθαι καὶ μέχρι γε Ταρσῶν ἧκεν … ἀλλὰ γὰρ μεταξύ … τέλος ἔσχεν τοῦ βίου)
'the holy Firmilianus was on his way to Antioch, and when he had reached Tharsus, we got the message that he had left this world'

The imperfect tense forms of momentaneous verbs of movement are sometimes used in a progressive function in Early and Classical Latin, and *egrediebatur* occurs in the function 'was leaving' in a passage from around

374. Cf. Pinkster (1998: 233–234).

100 CE ((289) above, Section 4.1.1); such forms are often found in the pluri-occasional function, as for instance in a passage from the fourth century CE (394). But a passage from around 750 CE has the periphrasis *egrediens erat* in the sense 'was leaving' (395).[375]

(394) Vulg. *Marc.* 1,5: *et* ***egrediebatur*** *ad illum omnis Iudaeae regio et Hierosolymitae uniuersi; et baptizabantur ab illo in Iordane flumine confitentes peccata sua*
'and there went out to him all the country of Judea, and all the people of Jerusalem; and they were baptized by him in the river Jordan, confessing their sins'

(395) *Vita Hugb.* p. 485 line 12: *ipse uero* ***egrediens erat*** *ab ecclesia, circumdatus plebe*
'he *was leaving* the church, surrounded by the people'

The development toward progressive periphrases starts in Late Latin, where there is an increasing number of such constructions especially in translations of the Bible, but it was first grammaticalized in the individual Romance languages. One problem with the earlier examples of this phenomenon is that many of them occur in texts translated from Greek and from a kind of Greek which might have been influenced by Semitic, namely in translations of the Bible, such as the Septuagint; there are such examples in the Vulgate translation from Hebrew as well ((149) above, Section 3.1.5). There are, however, also numerous examples in the biblical texts originally written in Greek. The use of *baptizabat* and *erat baptizans* in some passages from John illustrates the problem; the periphrasis in Latin always corresponds to a similar expression in Greek, and the function of the periphrasis differs somewhat; in (396a) it seems to give an overview of a past situation, whereas in (396b) it seems to have a progressive function.[376]

375. See Pinkster (1998: 230); cf. Eklund (1970: e.g. 74) and Bertinetto, Ebert, and de Groot (2000: 526); a recent study of such constructions in later Latin and Greek is Amenta (2003); on Italian see Giorgi and Pianesi (1997: 175); on the development in Romance, see Squartini (1998).

376. See Bertinetto, Ebert, and de Groot (2000: 530–531, 538) and Bertinetto (2000: 561–566); cf. Hofmann & Szantyr (1965 § 207d), Pinkster (1998: 230), and Haverling (2005b); and cf. Hopper and Traugott (2003: 158–159).

(396) a. Vulg. *Ioh.* 10,40: *et abiit iterum trans Iordanen, in eum locum ubi* ***erat*** *Iohannes* ***baptizans*** *primum*
(NT *Ioh.* 10,40: καὶ ἀπῆλθεν πάλιν πέραν τοῦ Ἰορδάνου εἰς τὸν τόπον ὅπου **ἦν** Ἰωάννης τὸ πρῶτον **βαπτίζων**)
'he went away again across the Jordan to the place where John at first baptized'

b. Vulg. *Ioh.* 3,22–23: *post haec uenit Iesus et discipuli eius in Iudaeam terram et illic demorabatur cum eis et* baptizabat. ***Erat*** *autem et Iohannes* ***baptizans*** *in Aenon iuxta Salim*
(NT *Ioh.* 3,22–23: μετὰ ταῦτα ἦλθεν ὁ Ἰησοῦς καὶ οἱ μαθηταὶ αὐτοῦ εἰς τὴν Ἰουδαίαν γῆν, καὶ ἐκεῖ διέτριβεν μετ' αὐτῶν καὶ ἐβάπτιζεν. **ἦν** δὲ καὶ Ἰωάννης **βαπτίζων** ἐν Αἰνὼν ἐγγὺς τοῦ Σαλίμ)
'after this Jesus and his disciples went into the land of Judea; there he remained with them and baptized. John also was baptizing at Aenon near Salim'

Often the periphrasis seems to indicate a higher degree of imperfectivity than the simple imperfect, as in (397), where the periphrasis in a stative expression means 'was ill', and (398a), where the imperfect *docebat* 'taught' provides an overview of the situation and the periphrasis *erat … docens* 'was teaching' describes what the situation was like. The adverbial ἐν τοῖς σάββασιν or *sabbatis* is ambiguous because it could have a plural sense and mean 'on the Sabbath days', but it it could also refer to a single occasion and mean 'on the Sabbath'. In the former case the function is pluri-occasional, as seems to be the case when it occurs with the simple imperfect tense form in Latin in (398b), but in the latter it describes a particular situation, as seems to be the case when the Latin translation has retained the periphrasis in (398c); these Latin translations thus use the imperfect tense in one case and the periphrasis in another. However, in (398d), where the reference is to a series of events, the periphrasis is found in both versions. There are also some examples of this phenomenon in other texts translated from Greek, for instance the sixth-century translation of Josephus's *Jewish History*, sometimes when there is no such expression (399a) or a different kind of expression in the Greek original (399b).

(397) Vulg. *Ioh.* 11,1–3: ***erat*** *autem quidam* ***languens*** *Lazarus a Bethania … Maria autem erat … cuius frater Lazarus* infirmabatur
(NT *Ioh.* 11,1–3: **ἦν** δέ τις **ἀσθενῶν**, Λάζαρος ἀπὸ Βηθανίας … ἦν δὲ Μαρίαμ … ἧς ὁ ἀδελφὸς Λάζαρος ἠσθένει)
'now a certain man was ill, Lazarus of Bethany. It was Mary whose brother Lazarus was ill'

(398) a. Vulg. *Marc.* 1,21–24: *et statim* sabbatis *ingressus synagogam* ***docebat*** *eos et stupebant super doctrina eius.* **erat** *enim* **docens** *eos quasi potestatem habens et non sicut scribae …*
(NT *Marc.* 1,21–24: καὶ εὐθὺς τοῖς σάββασιν [εἰσελθὼν] εἰς τὴν συναγωγὴν **ἐδίδασκεν**. Καὶ ἐξεπλήσσοντο ἐπὶ τῇ διδαχῇ αὐτοῦ, **ἦν** γὰρ **διδάσκων** αὐτοὺς ὡς ἐξουσίαν ἔχων καὶ οὐχ ὡς οἱ γραμματεῖς)
'and immediately on the sabbath he entered the synagogue and taught. And they were astonished at his teaching, for he taught them as one who had authority, and not as the scribes'

b. Vulg. *Luc.* 4,31: *ibique* ***docebat*** *illos* sabbatis
(NT *Luc.* 4,31: καὶ **ἦν διδάσκων** αὐτοὺς ἐν τοῖς σάββασιν)
'and there he taught them on the sabbath days'

c. Vulg. *Luc.* 13,10–13: ***erat*** *autem* ***docens*** *in synagoga eorum sabbatis et ecce mulier quae habebat spiritum infirmitatis annis decem et octo … quam cum uideret Iesus uocauit ad se*
(NT *Luc.* 13,10–13: **ἦν** δὲ **διδάσκων** ἐν μιᾷ τῶν συναγωγῶν ἐν τοῖς σάββασιν. καὶ ἰδοὺ γυνὴ πνεῦμα ἔχουσα ἀσθενείας ἔτη δέκα ὀκτώ … ἰδὼν δὲ αὐτὴν ὁ Ἰησοῦς προσεφώνησεν)
'now he was teaching in one of the synagogues on the sabbath. And there was a woman who had had a spirit of infirmity for eighteen years. And when Jesus saw her, he called her'

d. Vulg. *Luc.* 4,44: *et* ***erat praedicans*** *in synagogis Iudaeae*
(NT *Luc.* 4,44: καὶ **ἦν κηρύσσων** εἰς τὰς συναγωγὰς τῆς Ἰουδαίας)
'and he was preaching in the synagogues of Judaea'

(399) a. Joseph. *antiq.* 2,9,2 (209): *et illi quidem* ***erant*** *in isto malo* ***iacentes***
(καὶ οἱ μὲν ἦσαν ἐν τούτῳ τῷ κακῷ)
'and they were stuck in that evil'

b. Joseph. *antiq.* 3,2,1 (40): ***erant*** *autem in hoc* **instantes** *quique Goboth et Petram inhabitant*
(ἐτύγχανον δὲ οἱ πρὸς τοῦτο ἐνάγοντες οἵ τε τὴν Γοβολῖτιν καὶ τὴν Πέτραν κατοικοῦντες)
'and those who lived in Goboth and Petra were pressing hard in this matter'

However, translations from Greek are not the only texts in which there are examples of this phenomenon. These expressions are not common in texts from the third and fourth centuries CE, but there are examples in Christian authors like Lactantius (400a), Egeria (400b), and Lucifer of Cagliari (400c); Lucifer used such periphrastic expressions quite often.[377]

(400) a. Lact. *mort. pers.* 14,5: ***erant certantes*** *quis prior aliquid inueniret*
'they were fighting to see who would first find something'

b. *Itin. Eger.* 16,6: *speluncam, quam* ***sequentes fuerunt*** *forsitan per passus centum*
'a cave, which they followed for perhaps a hundred steps'

c. Lucif. *reg. apost.* 9 line 1: *si non bene agerem, non* **essem** *tanto tempore* ***regnans***
'if I did not do well I would not be reigning for such a long time'
(cf. ibid. 10: *si non bene facerem, non adhuc in regno essem; iam me deus extinxisset … si non bene agerem, numquam adhuc imperarem*)

The fact that these expressions are particularly common in Christian texts translated from Greek, and in texts written by people who were possibly inspired by such texts, has made some scholars regard this phenomenon as a result of the Greek influence, but this attitude has been questioned in recent

377. See Löfstedt (1911: 245–249); for a detailed analysis of such expressions in Latin, see Eklund (1970); and for discussion of the periphrastic forms in New Testament Greek, see Fanning (1990: 309–324); a recent study of such expressions in Greek and Latin is Amenta (2003); cf. Haverling (2005b: 171–174).

studies.[378] The rather peculiar character of the early passages in which the phenomenon is found makes it difficult to decide how to interpret the earliest examples, but Gregory of Tours and the Merovingian texts have a growing number of such constructions (401), and by then it is safer to assume that the development toward the Romance system of imperfective periphrases had begun.[379]

(401) a. Greg. Tur. *Franc.* 3,15: (Attalus) ***erat*** *enim intra Treuerici termini territurio cuidam barbaro* ***seruiens***
'Attalus was serving a certain barbarian in the area of Trèves'

b. Greg. Tur. *Franc.* 3,25: *at ille in regno firmatus, magnum se . . .* ***reddidit***. ***Erat*** *enim regnum cum iustitia* ***regens***, *sacerdotes* uenerans, *eclesias* munerans, *pauperes* releuans *et multa multis beneficia pia ac dulcissima* accommodans *uoluntate*
'as he had taken hold of his kingdom, he showed himself to be great. He ruled his kingdom with justice, he respected the clergy, supported the church financially, helped the poor, and he did many good and pious things for many people'

c. Greg. Tur. *Franc.* 3,31: (filia Theudorici et mater eius) ***erant*** *autem sub Arriana secta* ***uiuentes***
'(Theoderic's daughter and wife) lived according to the teaching of the Arrian sect'

Some constructions with *stare* are also found, often in the perfect tense but also in the imperfect tense. The examples I have found occur in the Bible (402), for which there are parallels in the Greek version, but also in Ammianus Marcellinus, who, as we have already seen, has a somewhat peculiar language as compared to the literary language of his day (403).[380]

378. See Amenta (2003: 146–148).
379. See Pinkster (1998: 230); also Eklund (1970: 74).
380. See Bertinetto (2000: 562); cf. Hofmann & Szantyr (1965 § 207d).

(402) a. Vulg. *Dan.* 10,11: *cumque dixisset mihi sermonem istum* ***steti tremens***
(LXX *Dan.* 10,11: καὶ ἐν τῷ λαλῆσαι αὐτὸν μετ' ἐμοῦ τὸ πρόσταγμα τοῦτο **ἔστην τρέμων**)
'while he was speaking this word to me, I stood up trembling'

b. Vulg. *Luc.* 23,9–10: *at ipse nihil illi respondebat /* ***stabant*** *etiam principes sacerdotum et scribae constanter* ***accusantes*** *eum*
(NT *Luc.* 23,9–10: αὐτὸς δὲ οὐδὲν ἀπεκρίνατο αὐτῷ. / εἱστήκεισαν δὲ οἱ ἀρχιερεῖς καὶ οἱ γραμματεῖς εὐτόνως κατηγοροῦντες αὐτοῦ)
'but he made no answer. The chief priests and the scribes stood by, vehemently accusing him'

(403) Amm. 17,1,8: *cum prope siluam uenisset ...* ***stetit*** diu ***cunctando***
'when he had come to a forest, he stood in hesitation for some time'

But, as already observed, the grammaticalization of such constructions as expressions of progressivity belongs to the history of Romance rather than to that of Latin.[381]

4.2.5 Tense and narrative

In Classical Latin, the perfect serves to give an overview of past situations and puts a situation or action in the foreground of the story, whereas the imperfect emphasizes the backgrounding of an action.[382] Backgrounding is thus an important factor in the viewpoint system in Classical Latin. However, as we have seen, in Late Latin the imperfect was expanding at the expense of the perfect in the function of giving an overview of a past situation, for instance in descriptions of how somebody reacted with silence to a statement made by another ((368) above, Section 4.2.1) or even with temporal adverbials ((374)–(378) above, Section 4.2.2). In the more literary texts, however, the use of the imperfect tense is somewhat more restricted than in the less literary texts.

381. See Bertinetto (2000: 561, 564) and Bertinetto, Ebert, and de Groot (2000: 538–541).
382. See Haverling (2001: 355–362); cf. also, e.g., Comrie (1978: 16–40) and Johanson (2000: 152–154); and Hofmann & Szantyr (1965 §§ 168, 176, 178), Pinkster (1995: 307–310), and Oldsjö (2001: 472–488).

The Early and Classical Latin *fuit quondam* 'once upon a time there was' corresponds to expressions with the imperfect in Romance languages, for instance the Italian formula *C'era una volta*. The striking parallel and difference between two passages from around 200 BCE and around 200 CE ((362a) and (363b) above, Section 4.1.7) has been brought up as evidence of this change.[383] But perhaps the comparison of Terence's opposition between *fuit* and *habitabat* in *Samia mihi mater fuit: ea habitabat Rhodi* 'my mother was from Samos; she was living at Rhodes' ((293a) above, Section 4.1.1) and the use of the imperfect in a sixth-century translation from the Greek (404a) provides us with better evidence of this development; it must be admitted, however, that this translation often has *fuit* in that function too (404b). In such cases there thus seems to be an overlap between *fuit* and *erat* in this text.

(404) a. *Vitae patr.* 3,14: ***erat*** *quidam monachus, et* ***habitabat*** *in eremo. Quaedam autem puella …* abiit *in desertum requirens eum*
'there was a certain monk, and he was living in the desert. A certain girl went out into the desert looking for him'

b. *Vitae patr.* 3,21: ***fuit*** *etiam de magnis patribus quidam senior, nomine Agathon … Quodam autem tempore* perrexerunt *ad uisitandum eum fratres*
'there was among the great fathers one who was older and whose name was Agathon. One time the brothers came to see him'

In stative expressions, the indications that there has been a genuine linguistic change are thus rather strong: (a) there is a considerable increase in the number of examples of the imperfect tense in main clauses in narrative texts; (b) there are important differences between the various translations of the Bible; and (c) in certain functions only the perfect tense is used in the earlier periods of Latin, but in Late Latin the imperfect tense may occur in those functions as well.

The historical present remains an important feature in Late Latin and it is often found in for instance Gregory of Tours, who may start a narrative

383. See Ronconi (1968: 62–63); cf. Pinkster (1995: 309–310).

with an absolute ablative (405a) or a participium coniunctum (405b) and use the historical present for many of the events and the imperfect to describe the background of these events.

(405) a. Greg. Tur. *Franc.* 3,1: defuncto *igitur* Chlodouecho regi, *quattuor filii eius . . . regnum eius* ***accipiunt*** *et inter se aequa lantia* ***diuidunt***. Habebat *iam tunc Theudoricus filium nomen Theudobertum*
'after the death of king Clovis, his four sons receive his kingdom and divide it fairly between them. Already at that time Theodoric had a son by the name of Theodobert'

b. Greg. Tur. *Franc.* 3,12: *Theodoricus uero cum exercitu Aruerno* ueniens, *totam regionem* ***deuastat*** *et* ***proterit***
'as Theodoric is coming to Arvernum, he lays the whole region waste and crushes it'

The historical infinitive, however, is a rare phenomenon in later Latin. This device had been particularly appreciated by the authors who imitated Sallust's archaizing style.[384]

5. Summary and conclusions

5.1 Early and Classical Latin

Verbal suffixes and infixes indicate various kinds of stative and dynamic actionality and agency, while prefixes indicate telicity, change of state, and focus on the beginning or end of a development or change (Section 2.1). In the earlier periods there is a system in which those who speak and write Latin choose between the different verbs with various affixes according to the actional content expressed by each of these verbs; for instance *agnosco* was often used in the sense 'gradually identify' and *cognosco* in the sense 'get to know about'.

384. See Hofmann & Szantyr (1965 § 200.c).

The Latin tense system is the result of the blurring of the Proto-Indo-European perfect and aorist, and the Latin verb is strictly divided into two stems, the *infectum* and the *perfectum*. The original opposition was probably of an aspectual nature, but this opposition was reinterpreted as indicating the relative sequence of events or situations (Sections 3, 3.2.2, 3.2.4). Some elements in Early Latin seem to reflect the Proto-Indo-European aorist, such as the sigmatic future and the apparently "perfective" use of the perfect infinitive. A couple of the seemingly archaic elements in the use of the perfect subjunctive in prohibitions and expressions indicating potentiality remain in Classical Latin (Sections 3, 3.1.4, 3.2.4).

Classical Latin has an opposition between the perfect and the imperfect in all the forms of actionality, but there are clear differences in the number of occurrences of the different kinds of actional expressions in the imperfect tense: such examples are considerably more numerous when the actionality is stative or is dynamic and atelic than when it is telic or momentaneous. The perfect offers an overview of a past situation or action, and the imperfect offers a description of a situation from within and may indicate, among other things, progressivity. In certain cases the Latin viewpoint opposition differs from the systems found in many other languages: there is for instance a viewpoint opposition even in the description of permanent states and of habitual actions in the past (Section 4.1). The somewhat difficult concept of grounding, an important element in the opposition between the perfective and imperfective viewpoints in general, is of particular importance in the opposition between the Latin perfect and imperfect tenses.[385]

The imperfect in Classical Latin may express progressivity, but it is also used with stative actionality and it may indicate pluri-occasionality and habituality. When indicating pluri-occasionality and habituality, however, it interrelates with the perfect according to a pattern also found in stative expressions. The Latin imperfect tense thus seems to be an example of an imperfective form indicating "continuousness".[386] The rather restricted use of the imperfective past in Classical Latin seems to confirm that the Latin imper-

385. For a discussion of this concept see, e.g., Vet (1991); cf. Oldsjö (2001: 472–488).
386. See Comrie (1978: 25–26); Bybee, Perkins, and Pagliuca (1994: 127) did not find such a form in their material.

fect in *-ba-* originates in a progressive periphrasis which has become weakened in sense and spread from dynamic to nondynamic expressions (Section 3.3.1).[387]

The Latin perfect, when used as a past tense, functions as a simple past rather than a perfective past: a simple past signals a past state, whereas a perfective past is either not used with stative verbs or has the effect of a present state with stative verbs (e.g., indicates change of state). The simple past character of the Latin perfect probably reflects its origin as the result of a blurring of the Proto-Indo-European perfect and aorist. The Greek aorist and the French passé simple, which have no such twofold origin or function, however, have a more perfective character. The simple past and the perfective past also interrelate in different ways with the imperfective; and the opposition made in Classical Latin, with its strong emphasis on perfective overview and foreground on the one hand and imperfective description and background on the other, corresponds to that when the nonimperfective alternative is a simple past rather than a perfective past.[388]

5.2 Late Latin

In Late Latin, there are major changes in the actional system as well as in the system of tenses and viewpoints. In the actional system, several of the suffixes, infixes, and prefixes lose their original actional function (Section 2.2). In the later periods there is a system in which those who speak and write Latin choose between the old verbs according to their traditional pragmatic function rather than according to the way they were formed (e.g., *erubesco* 'be ashamed' and *cognosco* 'know'). There are several reasons for these changes in Latin. One relevant factor is probably the extremely complex character of the Early and Classical Latin actional system.[389] The changes in the actional system take place gradually and over a long period of time, but in the texts from the late second and early third centuries CE, it is quite clear that the

387. See Baldi (2002: 397–398); cf. Bybee, Perkins, and Pagliuca (1994: 140–144).
388. See Bybee, Perkins, and Pagliuca (1994: 91–95).
389. Cf. Hopper and Traugott (2003: 102–103, 116–118) and Aitchison (2001: 176–178).

old system does not work as it used to in Classical Latin:[390] old verbs which previously had a telic or momentaneous sense now occur in a dynamic and atelic or in a stative sense; and new prefixed verbs are used in what appears to be the same semantic function as the unprefixed verbs.

In Late Latin there is displacement in the function of the tenses in the passive voice, so that the former synthetic tense forms in the infectum are replaced by periphrastic ones. There is also a tendency to use new periphrastic expressions to indicate future and perfect (Sections 3.1.5, 3.2.5, 3.3.5). Around 200 CE the earliest evidence of changes within the tense system appears: the first examples of the new construction with *habere* and the infinitive indicating future, and a growing tendency to use the periphrastic form with *esse* and the perfect participle where Classical Latin more often used the passive present forms. Some two hundred years later, the passive perfect and pluperfects are regularly formed with *fui* and *fueram* in the more vulgar texts. After two more centuries, in the late sixth and early seventh centuries, there appear the earliest undisputable examples of the previously resultative perfect with *habere* + participle being used to indicate current relevance, and the earliest evidence for the new synthetic future created from the *habere* + infinitive construction.

There are also changes in the relationship between the past tense forms, and the previously very strong emphasis on the relative sequence of events decreases. In Late Latin, the imperfect tense becomes more frequent, and sometimes it may give an overview of a past situation, while the previously noningressive stative perfect tense forms become more frequent in the ingressive function. There is an increase in the use of the stative perfect in the ingressive sense around 200 CE. In the late fourth and early fifth centuries there are indications of a change in the relationship between the perfect and imperfect tenses, when the imperfect tense is sometimes used with durative temporal adverbials without indicating anterior continuing and when one and the same passage in the Bible may be translated differently by different translators. Especially in the Christian texts translated from Greek or

390. This period seems to be a turning point in several respects in the history of Latin: see Haverling (2000: 459); the same period marks an important step in, for instance, the development from *gaudeo* and *dico* with the accusative and infinitive to *gaudeo* and *dico quod*: see Cuzzolin (1994: 184–187, 300); cf. Löfstedt (1959: 1–2).

Hebrew, there is a growing number of periphrastic expressions with *esse* and the present participle that indicate imperfectivity (Section 4.2).

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Subject index

Index of classical references

The index of classical references contains textual information on classical works cited in the text. Latin authors and their works are abbreviated according to the conventions of the *Thesaurus Linguae Latinae* (*ThLL*). Citations of early authors, especially those preserved in fragments, may vary. Since there is no standardized set of abbreviations for Greek, we have listed classical Greek authors by their full Latin name, preceded by a fully recognizable abbreviation (e.g. Xen. = Xenophon). Greek works are abbreviated so as to be maximally transparent to non-specialists. Biblical authors and works are included in the index, though other non-classical texts such as *El Cid* or *Don Quixote* are omitted.